WATER SUPPLY OUTLOOK FOR WASHINGTON

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
MAY 1, 1976

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SURVEYOR ENROUTE TO THE MT. BALDY ARIZONA SNOW COURSE
SCS PHOTO AZ-5460

PUBLISHED BY SOIL CONSERVATION SERVICE

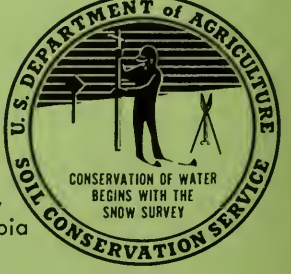
The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



USDA-SCS-PORTLAND, OREG. 1979

WATER SUPPLY OUTLOOK FOR WASHINGTON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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In Cooperation with

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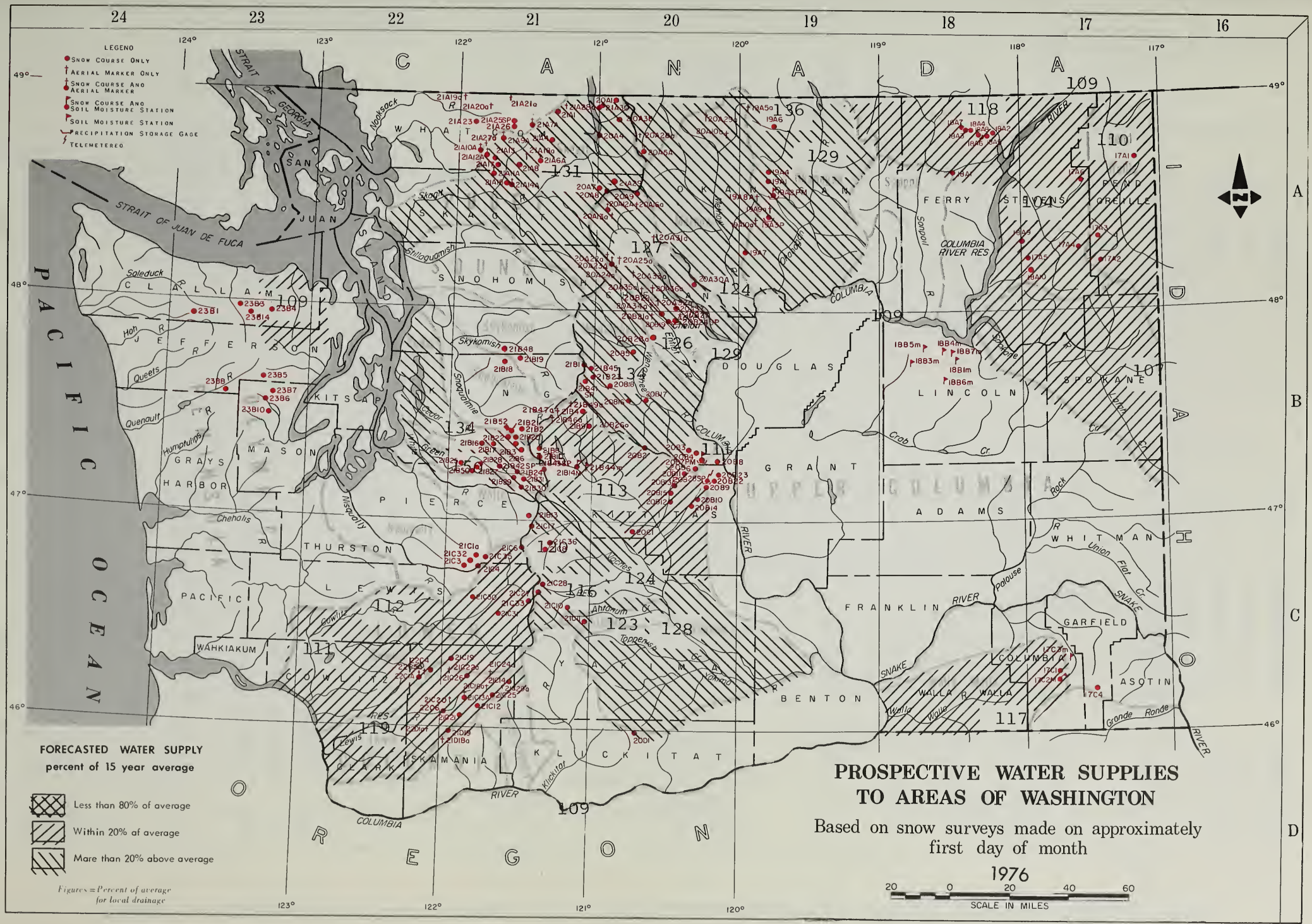
LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
FORECASTED WATER SUPPLY
percent of 15 year average
Less than 80% of average
Within 20% af average
Mare than 20% above average
Figures = Percent of average for local drainage
PROSPECTIVE WATER SUPPLIES TO AREAS OF WASHINGTON
Based on snow surveys made on approximately first day of month
1976
SCALE IN MILES
CANADA
OREGON
PACIFIC OCEAN
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
JUAN DE FUCA
WHATCOM
SKAGIT
SNOHOMISH
KING
KITSAP
CLALLAM
JEFFERSON
GRAYS HARBOR
MASON
PIERCE
THURSTON
LEWIS
WAHKIAKUM
COWLITZ
CLARK
SKAMANIA
KLICKITAT
YAKIMA
BENTON
FRANKLIN
KITTITAS
OKANOGAN
FERRY
STEVENS
PEND OREILLE
DOUGLAS
GRANT
ADAMS
LINCOLN
SPOKANE
WHITMAN
GARFIELD
ASOTIN
COLUMBIA
WALLA WALLA
COLUMBIA RIVER RES
Nooksack R.
Skagit R.
Stillaguamish R.
Snoqualmie R.
Skykomish R.
Wenatchee R.
Entiat R.
Chelan
Methow R.
Okanogan R.
Similkameen R.
Sanpoil R.
Colville R.
Kettle R.
Hoh R.
Queets R.
Quinault R.
Humptulips R.
Chehalis R.
Cowlitz R.
Lewis R.
Nisqually R.
Deschutes R.
Yakima R.
Naches R.
Ahtanum Cr.
Toppenish Cr.
Satus Cr.
Crab Cr.
Palouse R.
Union Flat Cr.
Rock Cr.
Spokane R.
Little Spokane R.
Snake R.
Walla Walla R.
Grande Ronde R.
Columbia R.
Soleduck
Queets
Quenault
Green
Cedar
Kickitat
Lewis
Soleduck
Hoh
Skykomish
Snoqualmie
Nisqually
Cowlitz
Toppenish
Satus
Ahtanum
Naches
Methow
Okanogan
Similkameen
Sanpoil
Colville
Kettle
Crab Cr.
Palouse
Union Flat Cr.
Rock Cr.
Little Spokane
Walla Walla
Grande Ronde
Snake
Columbia
Yakima
Kittitas
Chelan
Douglas
Grant
Adams
Lincoln
Whitman
Garfield
Asotin
Franklin
Benton
Klickitat
Skamania
Clark
Wahkiakum
Pacific
Grays Harbor
Mason
Jefferson
Clallam
Kitsap
Pierce
Thurston
Lewis
Cowlitz
Whatcom
Skagit
Snohomish
King
Okanogan
Ferry
Stevens
Pend Oreille
Spokane
Columbia
Walla Walla
Garfield
Asotin
Yakima
Kittitas
Chelan
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Whatcom
Skagit
Snohomish
King
Okanogan
Ferry
Stevens
Pend Oreille
Spokane
Columbia
Walla Walla
Garfield
Asotin

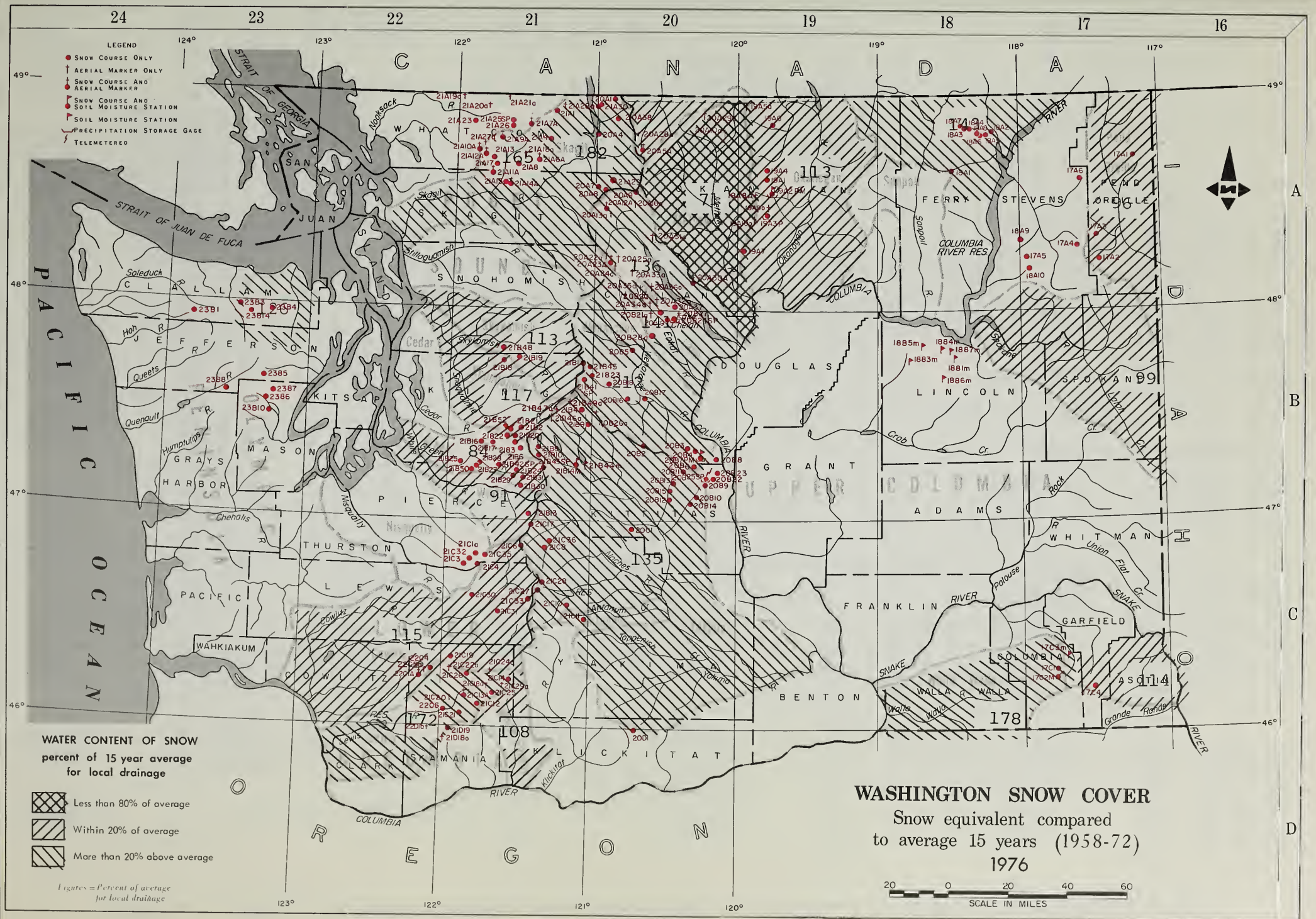
INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
UPPER COLUMBIA DRAINAGE					
Pend Oreille River					
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970
Kettle River					
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	18A3	28	39N	35E	4070
Cabin Creek	18A8	5	38N	36E	3170
Goat Creek	18A4	26	39N	35E	3595
Snow Caps Creek	18A5	3	38N	36E	2150
Snow Caps Trail	18A6	5	38N	36E	2720
Summit G. S.	18A7	20	39N	35E	4600
Colville River					
Baird	17A6	19	36N	42E	3215
Carlson	18A9	34	32N	38E	2885
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	38E	4990
Togo	18A10	6	29N	38E	3370
Sanpoil River					
Sherman Creek Pass	18A1	19	36N	35E	5350
Okanogan River					
Clark	19A8a	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A28a	32	40N	18E	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845
Methow River					
Billy Goat Pass	20A10a	10	38N	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650
Chelan Lake Basin					
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	8	31N	16E	5275
Lyman Lake	20A23a	18	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	4780
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	2082Ba	19	28N	18E	5425
Brief	20819	34	28N	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4800
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	18E	6510
Pope Ridge	20820	22	29N	18E	4300
Pope Ridge Snow Pillow	20824SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	18E	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3850
Tommy Creek	20B21a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	21823	7	26N	15E	3170
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1810
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B18	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700
Wenatchee River (continued)					
Trough #2	20B25SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300
Squilchuck Creek					
Beehive Springs	2083	12	21N	19E	4400
Scout-A-Vista	20B4	18	21N	20E	3400
Stemilt Creek					
Jump-Off	2088	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	2087PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	1881m	32	27N	34E	2440
Jack Woods	1883m	28	27N	31E	2750
Krause	18B4m	21	27N	33E	2420
Sheffels	18B5m	17	27N	32E	2378
Sherman	18B7m	24	27N	33E	2440
Wheatridge	1886m	24	25N	32E	2290
Yakima River					
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	2189	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	2089	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21844m	15	20N	14E	2200
Fish Lake	2184	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20811	29	21N	19E	5385
High Creek	20B12	34	20N	19E	2930
Joe Lake	21846a	22	23N	12E	4624
Lake Cle Elum	21814M	15	20N	14E	2200
Lemah Creek	21847a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20814	20	19N	20E	3360
Tunnel Avenue	2188	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20815	22	20N	19E	3360
Waptus Lake	21849a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500
LOWER COLUMBIA DRAINAGE					
Asotin Creek					
Spruce Springs	17C4	9	8N	40E	5700
Mill Creek					
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400
Klickitat River					
Satus Pass	20D1	21	6N	17E	4030
White Salmon River					
Cultus Creek	21C12	35	7N	8E	4000
Lewis River					
Blue Lake	21C22a	19	9N	8E	4800
Bob's Trail	21C21	25	8N	7E	2200
Calamity Ridge	22D1a	8	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200
Lewis River (continued)					
Divide Meadow	21C29a	21	9N	10E	5600
Grand Meadow	21C25	28	8N	9E	3500
Lone Pine Shelter	21C26	8	9N	7E	3800
Marble Mountain	22C5a	24	8N	5E	3200
New Muddy River	22C6	36	8N	6E	2000
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	8N	7E	3400
Surprise Lakes	21C13A	14	7N	8E	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D18a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	28	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2870
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	8E	3250
PUGET SOUND DRAINAGE					
Nisqually River					
Ghost Forest	21C4	23	15N	8E	4550
Longmire	21C3	29	15N	8E	2760
Paradise Park (New)	21C35	13	15N	8E	5500
Stem Glade	21C1	13	15N	8E	5050
White River					
Corral Pass	21B13	30	18N	11E	6000
Green River					
Airstrip	21824	18	20N	11E	1800
Charley Creek	21825	27	21N	8E	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21827	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21829	36	20N	10E	3100
Lynn Lake	21850	21	20N	8E	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21810	25	21N	11E	3860
Twin Camp	21B30	18	19N	11E	4100
Cedar River					
City Cabin	2183	10	21N	10E	2390
Mt. Gardner	21821	30	22N	10E	3300
Mt. Gardner Aux.	21822	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington New	21852	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21820	1	21N	10E	3400
Snoqualmie River					
Alpine Meadow	21848	31	27N	9E	3500
Olallie Meadows	2182	19	22N	11E	3625
South Fork Tolt	21B18	26	26N	9E	1900
Skykomish River					
Lake Elizabeth	21B19	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	3680
Brown Top	21A28a	26	40N	12E	6000
Devils Park	20A4	34	38N	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20A8	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2800
Thunder Basin	21A30	10	35N	14E	4200
Baker River					
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	8	36N	8E	3800
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	800
Marten Lake	21A9A	23	38N	8E	3600
Mount Blum	21A18a	27	38N	10E	5800
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	8E	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	18	36N	9E	1600
Watson Lakes	21A8	25	37N	9E	4500
Nooksack River					
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	8E	5100
Glacier Creek	21A23	9-10	38N	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200
OLYMPIC PENINSULA					
Dungeness River					
Deer Park	2384	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	31	29N	6W	4500
Elwha River					
Hurricane	2383	36	29N	7W	4500
Skokomish River					
Black and White	2387	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	2385	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900
Soleduck River					
Deer Lake	23B1	14	28N	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	Snow Course Only
21A7a	Aerial Marker Only
21A7A	Snow Course and Aerial Marker
21A7M	Snow Course and Soil Moisture Station
21A7m	Soil Moisture Station
21A7P	Snow Course and Precipitation Storage Gage
21A7p	Precipitation Storage Gage
21A7SP	Snow Pillow


LEGEND
Snow Course Only
Aerial Marker Only
Snow Course And Aerial Marker
Snow Course And Soil Moisture Station
Soil Moisture Station
Precipitation Storage Gage
Telemetered
WATER CONTENT OF SNOW
percent of 15 year average for local drainage
Less than 80% of average
Within 20% of average
More than 20% above average
Figures = Percent of average for local drainage
WASHINGTON SNOW COVER
Snow equivalent compared to average 15 years (1958-72)
1976
SCALE IN MILES
CANADA
OREGON
PACIFIC OCEAN
STRAIT OF JUAN DE FUCA
STRAIT OF GEORGIA
SAN JUAN
WHATCOM
SKAGIT
SNOHOMISH
CLALLAM
JEFFERSON
KITSAP
MASON
GRAYS HARBOR
PIERCE
THURSTON
LEWIS
PACIFIC
WAHKIAKUM
COWLITZ
CLARK
SKAMANIA
KLICKITAT
YAKIMA
KITTITAS
BENTON
FRANKLIN
GRANT
ADAMS
DOUGLAS
OKANOGAN
FERRY
STEVENS
PEND OREILLE
LINCOLN
SPOKANE
WHITMAN
GARFIELD
ASOTIN
COLUMBIA
WALLA WALLA
Nooksack
Skagit
Stillaguamish
Snoqualmie
Skykomish
Cedar
Soleduck
Hoh R.
Queets
Quenault
Humptulips
Wynoochee
Satsop
Chehalis
Nisqually
Deschutes
Nisqually
Mashel
Tilton
Cowlitz
Lewis
Klickitat
Yakima
Naches
Ahtanum Cr.
Toppenish Cr.
Methow
Okanogan
Similkameen
Sanpoil
Columbia River Res
Chelan
Entiat
Wenatchee
Crab Cr.
Palouse
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INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

UPPER COLUMBIA DRAINAGE

Pend Oreille River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Boyer Mountain	17A2	7	31N	43E	5250
Bunchgrass Meadow	17A1	24	37N	44E	5000
Winchester Creek	17A3	30	33N	43E	2970

Kettle River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Boulder Road	18A2	36	39N	36E	1450
Butte Creek	1BA3	2B	39N	35E	4070
Cabin Creek	1BAB	5	3BN	36E	3170
Goat Creek	1BA4	26	39N	35E	3595
Snow Caps Creek	1BA5	3	38N	36E	2150
Snow Caps Trail	1BA6	5	38N	36E	2720
Summit G. S.	1BA7	20	39N	35E	4600

Colville River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Baird	17A6	19	36N	42E	3215
Carlson	1BA9	34	32N	3BE	2B85
Chewelah	17A4	11	32N	41E	4925
Stranger Mountain	17A5	26	31N	3BE	4990
Togo	18A10	6	29N	3BE	3370

Sanpoil River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Sherman Creek Pass	18A1	19	36N	35E	5350

Okanogan River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Clark	19ABa	2	36N	23E	7000
Muckamuck	19A9a	20	36N	24E	6750
Mutton Creek No. 1	19A1	30	37N	24E	5700
Mutton Creek No. 2	19A4	19	37N	24E	6000
Paysayten	20A2Ba	32	40N	1BE	4300
Rusty Creek	19A3P	18	35N	24E	4000
Salmon Meadows	19A2PM	33	37N	24E	4500
Starvation Mtn.	19A10a	15	35N	23E	6750
Touts Coulee	19A6	30	39N	25E	2845

Methow River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Billy Goat Pass	20A10a	10	3BN	20E	6400
Dollar Watch	20A29a	8	39N	20E	7000
Harts Pass	20A5A	7	37N	18E	6500
Horseshoe Basin	19A5a	15	40N	23E	7000
Loup Loup	19A7	36	34N	23E	4650

Chelan Lake Basin

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cloudy Pass	20A22a	12	31N	15E	6500
Greenwood Flat	20A25a	3	31N	16E	3540
Little Meadows	20A24a	B	31N	16E	5275
Lyman Lake	20A23a	1B	31N	16E	5900
Park Creek Flat	20A13a	19	34N	16E	2220
Park Creek Ridge	20A12A	18	34N	16E	4600
Petersons	20A16a	3	34N	17E	3730
Rainy Pass	20A9	21	35N	17E	47B0
Safety Harbor	20A30A	32	31N	20E	6300
War Creek Pass	20A31a	34	33N	1BE	6500

Entiat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Blue Creek G.S.	20B2Ba	19	2BN	18E	5425
Brief	20B19	34	2BN	19E	1600
Entiat Meadows	20A33a	28	31N	17E	4B00
Entiat River Trail	20A34a	2	29N	17E	3150
Four Mile Ridge	20B27a	15	28N	19E	7000
Fox Camp	20A36a	17	30N	1BE	6510
Pope Ridge	20B20	22	29N	1BE	4300
Pope Ridge Snow Pillow	20B24SP	22	29N	18E	4300
Pugh Ridge	20A32a	34	30N	1BE	6400
Shady Pass	20A37	20	29N	19E	6200
Snow Brushy	20A35a	21	30N	17E	3B50
Tommy Creek	20B21a	10	2BN	1BE	5300

Wenatchee River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Berne-Mill Creek	21B23	7	26N	15E	3170
Berne-Mill Creek (New)	21B41SP	13	26N	14E	3240
Blewett Pass No. 2	20B2	35	22N	17E	4270
Chiwaukum G. S.	20B16	4	25N	17E	1B10
Lake Wenatchee	20B5	33	27N	17E	1970
Leavenworth R. S.	20B17	1	24N	17E	1127
Merritt	20B1B	4	26N	16E	2140
Stevens Pass	21B1	14	26N	13E	4070
Stevens Pass Sand Shed	21B45	12	26N	19E	3700

Wenatchee River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Trough #2	20B25SP	10	20N	20E	5310

Colockum Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Colockum Creek Upper	20B22	11	20N	20E	5300
Colockum Creek Lower	20B23	1	20N	20E	4300

Squilchuck Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Beehive Springs	20B3	12	21N	19E	4400
Scout-A-Vista	20B4	1B	21N	20E	3400

Stemilt Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Jump-Off	20BB	34	21N	20E	4450
Stemilt Slide	20B6	30	21N	20E	5000
Upper Wheeler	20B7PM	30	21N	20E	4400

Crab Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Creston-Kunz	1BB1m	32	27N	34E	2440
Jack Woods	1BB3m	28	27N	31E	2750
Krause	1BB4m	21	27N	33E	2420
Sheffels	1BB5m	17	27N	32E	237B
Sherman	1BB7m	24	27N	33E	2440
Wheatridge	1BB6m	24	25N	32E	2290

Yakima River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Ahtanum R. S.	21C11	24	12N	14E	3100
Big Boulder Creek	21B9	35	23N	14E	3200
Bumping Lake	21C8	23	16N	12E	3450
Bumping Lake New	21C36	13	16N	12E	3400
Colockum Pass	20B9	25	20N	20E	5370
Cooke Creek	20B10	17	19N	20E	4123
Domery Flat	21B44m	15	20N	14E	2200
Fish Lake	21B4	34	24N	14E	3371
Green Lake	21C10	3	12N	13E	6000
Grouse Camp	20B11	29	21N	19E	53B5
High Creek	20B12	34	20N	19E	293C
Joe Lake	21B46a	22	23N	12E	4624
Lake Cle Elum	21B14M	15	20N	14E	2200
Lemah Creek	21B47a	7	23N	13E	3327
Manastash	20C1	24	17N	16E	3935
Morse Lake	21C17	6	16N	11E	5400
Nanum	20B13	4	20N	19E	3875
Trail Creek	20B14	20	19N	20E	3360
Tunnel Avenue	21B8	13	21N	11E	2450
Van Epps Pass	20B26a	16	23N	15E	5925
Walters Flat	20B15	22	20N	19E	3360
Waptus Lake	21B49a	12	23N	13E	3024
White Pass (East Side)	21C28	2	13N	11E	4500
White Pass (Leach Lake)	21C27	1	13N	11E	4500

LOWER COLUMBIA DRAINAGE

Asotin Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Spruce Springs	17C4	9	BN	40E	5700

Mill Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Couse	17C3m	2	9N	40E	3370
Homestead	17C1	11	9N	40E	4030
Martin Springs (Helmers SM)	17C2M	23	9N	40E	4400

Klickitat River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Satus Pass	20D1	21	6N	17E	4030

White Salmon River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cultus Creek	21C12	35	7N	BE	4000

Lewis River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Blue Lake	21C22a	19	9N	8E	4B00
Bob's Trail	21C21	25	BN	7E	2200
Calamity Ridge	22D1a	B	5N	5E	2500
Council Pass	21C18a	24	9N	9E	4200

Lewis River (continued)

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Divide Meadow	21C29a	21	9N	10E	560C
Grand Meadow	21C25	2B	BN	9E	3500
Lone Pine Shelter	21C26	B	9N	7E	3B00
Marble Mountain	22C5a	24	BN	5E	3200
New Muddy River	22C6	36	BN	6E	200C
Oldman Pass	21D19	22	6N	7E	3100
Plains of Abraham	22C1a	35	9N	5E	4400
Smith Creek Road	22C4	29	9N	6E	2100
Spencer Meadow	21C20a	16	BN	7E	3400
Surprise Lakes	21C13A	14	7N	BE	4250
Table Mountain	21C24a	20	9N	9E	4200
Timbered Peak	21D1Ba	36	6N	6E	3000

Cowlitz River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cayuse Pass	21C6	15	16N	10E	5300
Mosquito Meadows	21C19	33	10N	7E	4100
Ohanapecosh	21C32	2B	15N	10E	2200
Packwood Lake	21C31	21	13N	10E	2B70
Pigtail Peak	21C33	11	13N	11E	5900
Potato Hill	21C14	36	10N	10E	4500
Willame Creek	21C30	3	13N	BE	3250

PUGET SOUND DRAINAGE

Nisqually River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Ghost Forest	21C4	23	15N	BE	4550
Longmire	21C3	29	15N	BE	2760
Paradise Park (New)	21C35	13	15N	BE	5500
Stem Glade	21C1	13	15N	BE	5050

White River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Corral Pass	21B13	30	1BN	11E	6000

Green River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Airstrip	21B24	1B	20N	11E	1B00
Charley Creek	21B25	27	21N	BE	1200
Cougar Mountain	21B42SP	21	21N	9E	3200
Grass Mountain No. 2	21B27	14	20N	8E	2900
Grass Mountain No. 3	21B28	12	20N	8E	2100
Lester Creek	21B29	36	20N	10E	3100
Lynn Lake	21B50	21	20N	BE	4000
Sawmill Ridge	21B31	5	19N	11E	4700
Snowshoe Butte	21B43SP	14	20N	11E	5000
Stampede Pass	21B10	25	21N	11E	3B60
Twin Camp	21B30	18	19N	11E	4100

Cedar River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
City Cabin	21B3	10	21N	10E	2390
Mt. Gardner	21B21	30	22N	10E	3300
Mt. Gardner Aux.	21B22	31	22N	10E	2500
Mt. Lindsay	21B16	31	22N	9E	2500
Mt. Washington New	21B52	8	22N	9E	3000
Rex River	21B17	11	21N	9E	2400
South Fork Cedar	21B6	24	21N	10E	3000
Tinkham Creek	21B20	1	21N	10E	3400

Snoqualmie River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Alpine Meadow	21B48	31	27N	9E	3500
Olallie Meadows	21B2	19	22N	11E	3625
South Fork Tolt	21B1B	26	26N	9E	1900

Skykomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Lake Elizabeth	21B19	33	26N	10E	2900

Skagit River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Beaver Creek Trail	21A4	35	39N	12E	2200
Beaver Pass	21A1	9	39N	12E	36B0
Brown Top	21A2Ba	26	40N	12E	6000
Devils Park	20A4	34	3BN	16E	5900
Freezeout Creek Trail	20A1	14	40N	14E	3500
Freezeout Meadow New	20A38	8	40N	16E	5000
Granite Creek	21A29	25	36N	16E	3500
Meadows Cabins	20AB	29	36N	14E	1900
New Hozomeen Lake	20A7	19	40N	14E	2B00
Thunder Basin	21A30	10	35N	14E	4200

Baker River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Baker Pass	21A27a	1	37N	7E	4900
Dock Butte	21A11A	B	36N	BE	3B00
Easy Pass	21A7A	19	39N	11E	5200
Jasper Pass	21A6A	17	38N	11E	5400
Komo Kulshan	21A17	31	37N	9E	B00
Marten Lake	21A9A	23	3BN	8E	3600
Mount Blum	21A1Ba	27	3BN	10E	5B00
Rocky Creek	21A12A	20	37N	8E	2100
Schreibers Meadow	21A10A	18	37N	BE	3400
S. F. Thunder Creek	21A14A	20	36N	9E	2200
Sulphur Creek	21A13	22	37N	8E	1600
Three Mile Creek	21A15	1B	36N	9E	1600
Watson Lakes	21AB	25	37N	9E	4500

Nooksack River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Bald Mountain	21A19a	7	40N	7E	4400
Canyon	21A20A	20	40N	BE	5100
Glacier Creek	21A23	9-10	3BN	7E	3700
Panorama New	21A26	17	39N	9E	4300
Panorama Snow Pillow	21A25SP	17	39N	9E	4300
Twin Lakes	21A21a	16	40N	9E	5200

OLYMPIC PENINSULA

Dungeness River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Deer Park	23B4	1	28N	5W	5200

Morse Creek

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Cox Valley	23B14	31	29N	6W	4500

Elwha River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Hurricane	23B3	36	29N	7W	4500

Skokomish River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Black and White	23B7	17	24N	5W	4200
Black and White Lakes	23B6	16	24N	5W	4700
Four Stream	23B10	1	23N	6W	3000
Home Sweet Home	23B5	28	25N	5W	5200
Sundown Pass	23B8	25	24N	7W	3900

Soleduck River

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV
Deer Lake	23B1	14	2BN	9W	3900

LEGEND

NUMBERING SYSTEM EXAMPLE

21A7	SNOW COURSE ONLY
21A7a	AERIAL MARKER ONLY
21A7A	SNOW COURSE AND AERIAL MARKER
21A7M	SNOW COURSE AND SOIL MOISTURE STATION
21A7m	SOIL MOISTURE STATION
21A7P	SNOW COURSE AND PRECIPITATION STORAGE GAGE
21A7p	PRECIPITATION STORAGE GAGE
21A7SP	SNOW PILLOW

WATER SUPPLY OUTLOOK

State of Washington

May 1, 1976

The situation as of May 1, 1976 is very similar to that which we were reporting last year at this time. It now appears that the state of Washington will enjoy another irrigation season without fear of water shortages and the situation with regards to damaging high flows is not too great over most of the state. There are a few locations where the National Weather Service is forecasting a 50-50 chance that the river stage will exceed flood stage in the following month, but this high flow is not expected to be very severe this year. High water is predominately based upon temperature and precipitation which we can expect during the month of May and up through the first part of June. If it so happens that precipitation is well above normal and the temperature also above normal, then damaging flows will most certainly occur, but that is not being forecast as of this date. If the precipitation that occurred during April is any indication of what we can expect during May, then we don't have any worries at all. In fact, if that occurred, it is doubtful that these streams would even reach flood stage. Rainfall was below normal in all drainage divisions, as reported by the National Weather Service, except for the northeastern portion of the state and that, only 8 percent above average. Runoff during the month was mixed, with the main stem having 12 to 17 percent above normal flows except at The Dalles, which was 26 percent above. This is a result of increased outflow of the Snake River Basin. Tributary streams were generally below normal where the watersheds started at high elevations, but in the low elevation watersheds,such as the Palouse and Walla Walla, flows were well above normal,80 and 54 percent, respectively. As a result of this mix up of outflows during April, subsequent water supply forecasts for the May-September period have been altered slightly - some up,some down - but overall the situation is very similar to that which was reported last month.

SNOW COVER

We have, generally, an excellent snow cover over the state of Washington and tributary drainage areas with, again, minor exceptions. For those locations with a predominance of low elevation snow courses, snow cover ranges from a low of 29 percent below for the Methow River, to a high of 112 percent above for the Wenatchee.

SNOW COVER (Cont.)

The break down by major basin areas indicates the snow cover to be 4 percent below average in the Pend Oreille Drainage, 43 percent above in the Kettle, 1 percent below in the Spokane Drainage of northern Idaho, 13 percent above normal in the Okanogan-Similkameen area, 21 percent below, as previously reported, on the Methow, 36 percent above for the Chelan, as measured by only one snow course. The Entiat is reported to have a snow pack 41 percent above normal, the Yakima 35 percent above and the high point, Wenatchee, 212 percent of normal. Along the Lower Columbia, the snow pack on the Asotin Creek, as measured by one snow course, is 14 percent above normal, while Mill Creek Drainage is 78 percent above. The White Salmon, measured by two snow courses, has a snow cover that is 8 percent above normal and the Lewis, measured by seventeen snow courses, 72 percent above. The Cowlitz River, measured by five snow courses only, has a snow pack that is 15 percent above average. On the Puget Sound Drainage, the Skagit comes in with the greatest snow cover - 82 percent above normal, this measured by thirteen snow courses. The Baker, as measured by eleven snow courses, has a snow pack that is 65 percent above normal. The low point of these drainages is the White, measured by three snow courses only, and it, 9 percent below normal. Only one snow course in the Olympic Drainage has records that can be used for comparison to average and this, the one snow course on Elwha, indicates the snow pack to be 26 percent above average.

RESERVOIRS

The reservoir situation in the state is very good. The water is being managed to utilize it for the best possible runoff situation. Reservoirs with high forecasted inflow are being lowered to take care of the expected runoff without causing excessive damage. Irrigation reservoirs are being held to reduce damaging outflows, yet maintain a full head. Power reservoirs, such as Franklin D. Roosevelt, are very low for this time of year, but they can and will fill in short order with the spring runoff.

PRECIPITATION

Rainfall during April was all below normal except in the northeastern portion of the state. The Columbia in Canada was reported to have precipitation during the month 23 percent below average; the Pend Oreille-Spokane Drainage, 5 percent below average; the northeastern portion of the state, 8 percent above; the southeastern portion of the state, 1 percent below; central Washington, 15 percent below average; and the northcentral area, 44 percent below average. On the west slopes of the Cascades, the northwestern slopes were reported to have 23 percent below average and the southwestern slopes, 19 percent below.

STREAMFLOW

During the month of April, as previously reported, flows ranged from a high of 80 percent above normal to a low of 13 percent below, with the main stem of the Columbia, 12 to 26 percent above average. Forecasts have not been altered much, percentagewise, from that which was reported last month and currently range from a low of 4 percent above normal for the Colville River, as measured at Kettle Falls, to a high of 50 percent above normal on the Green River system. Numerical forecasts can be found following this narrative.

STREAMFLOW FORECASTS - MAY, 1976

The following summarized runoff forecasts are based principally on mountain snow-cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1975 are preliminary and subject to revision.

Basin, Stream and Station	Forecast Runoff 1976	% 15-Yr. Avg.	Fore-cast period	Seasonal Streamflow in Thousands of Acre-Feet 1975	1974	1973	15-Yr. Average 58-72
COLUMBIA BASIN							
COLUMBIA RIVER SYSTEM							
Columbia River	47400	109	May-Sept	39322	50321	32773	43490
at Birchbank 1/	38100	110	May-July	31167	40586	25853	34632
	27100	110	May-June	20668	27987	18180	24633
Columbia River	67700	109	May-Sept	62306	75369	41919	62110
at Grand Coulee 1/	56600	110	May-July	51684	63900	34263	51473
	43100	110	May-June	37148	47262	25956	39153
Columbia River	75400	111	May-Sept	69286	86002	44972	67890
bl. Rock Island Dam 1/	61900	109	May-July	58355	73543	37055	56790
	48000	111	May-June	42335	54309	27887	43202
Columbia River	99800	109	May-Sept	98825	119784	58016	91550
at The Dalles, OR 1/	83000	108	May-July	84141	103630	47114	76815
	66700	111	May-June	62891	79342	36249	60083
PEND OREILLE RIVER SYSTEM							
Pend Oreille River	15100	110	May-Sept	16544	18438	7226	13740
bl. Box Canyon	13600	109	May-July	14857	16990	6529	12471
	11400	108	May-June	11572	13619	5670	10561
KETTLE RIVER SYSTEM							
Kettle River	1900	118	May-Sept	1747	2330	992	1614
nr. Laurier	1800	117	May-July	1665	2251	964	1534
	1600	116	May-June	1479	1975	892	1381
Colville River	95	104	May-Sept		164	32	91
at Kettle Falls	83	104	May-July		147	29	80
	73	103	May-June		130	27	71

1/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.

Basin, Stream and Station	Forecast Runoff 1976	% 15-Yr. Avg.	Forecast period	Seasonal Streamflow in Thousands of Acre-Feet 1975	1974	1973	15-Yr. Average 58-72
SPOKANE RIVER SYSTEM *							
Spokane River	2160	107	May-Sept	2611	3389	778	2010
at Post Falls, ID 2/	2060	107	May-July	2467	3271	720	1926
	1900	106	May-June	2259	2998	660	1800
OKANOGAN RIVER SYSTEM							
Similkameen River	1938	136	May-Sept	1398	2094	688	1425
nr. Nighthawk	1786	134	May-July	1303	1970	649	1333
	1538	136	May-June	1057	1588	573	1131
Okanogan River	2050	129	May-Sept	1464	2511	704	1587
nr. Tonasket	1830	127	May-July	1319	2288	646	1446
	1540	127	May-June	1063	1784	561	1213
METHOW RIVER SYSTEM							
Methow River	1170	124	May-Sept		1517	466	946
nr. Pateros	1080	123	May-July		1407	430	879
	910	122	May-June		1120	370	748
CHELAN RIVER SYSTEM							
Chelan River	1470	129	May-Sept	1295	1610	702	1139
at Chelan 3/	1290	129	May-July	1143	1369	605	999
	980	128	May-June	783	963	469	767
Stehekin River	1050	127	May-Sept		1153	490	830
at Stehekin	905	129	May-July		926	396	702
	685	130	May-June		648	301	526
Entiat	280	126	May-Sept		364	132	223
nr. Ardenvoir	256	126	May-July		323	118	204
	210	127	May-June		232	99	165

* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho.

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversions by Spokane Valley Farms Company and Rathdrum Prairie Canals.

3/ Observed flow corrected for storage in Lake Chelan.

Basin, Stream and Station	Forecast Runoff 1976	Seasonal Streamflow in Thousands of Acre-Feet: % 15-Yr. Avg.	Fore-cast period	1975	1974	1973	15-Yr. Average 58-72
WENATCHEE RIVER SYSTEM							
Wenatchee River at Plain	1560	134	May-Sept	1316	1750	689	1165
	1400	135	May-July	1182	1492	608	1040
	1100	136	May-June	844	1028	488	809
Wenatchee River at Peshastin	2200	139	May-Sept	1805	2333	903	1583
	1970	138	May-July	1623	2008	808	1426
	1560	139	May-June	1164	1409	656	1121
Stemilt Basin nr. Wenatchee	150*	110	May-Sept				138*
YAKIMA RIVER SYSTEM							
Yakima River nr. Martin 4/	132	115	May-Sept	156	204	63	115
	121	116	May-July	142	187	55	104
	101	114	May-June	115	143	50	89
Yakima River at Cle Elum 5/	900	113	May-Sept	1020	1282	441	794
	820	116	May-July	920	1154	376	706
	690	116	May-June	750	886	319	593
Yakima River nr. Parker 6/	1700	128	May-Sept			415	1328
	1670	129	May-July			423	1298
	1480	126	May-June			432	1178
Kachess River nr. Easton 7/	116	116	May-Sept	141	179	50	100
	109	117	May-July	132	165	46	93
	96	118	May-June	107	128	43	81
Cle Elum River nr. Roslyn 8/	485	118	May-Sept	506	676	237	410
	445	120	May-July	459	595	207	371
	360	118	May-June	355	431	172	306
Bumping River nr. Nile 9/	155	120	May-Sept	172	213	63	129
	142	120	May-July	155	190	57	118
	116	121	May-June	112	135	51	96

* Thousands of Miners' Inches.

4/ Observed flow corrected for storage in Lake Keechelus.

5/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.

6/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.

7/ Observed flow corrected for storage in Lake Kachess.

8/ Observed flow corrected for storage in Lake Cle Elum.

9/ Observed flow corrected for storage in Bumping Lake.

Basin, Stream and Station	Forecast Runoff 1976	% 15-Yr. Avg.	Fore-cast period	Seasonal Streamflow in Thousands of Acre-Feet 1975	1974	1973	15-Yr. Average 58-72
YAKIMA RIVER SYSTEM (Cont.)							
American River	129	115	May-Sept	141	185	59	112
nr. Nile	118	115	May-July	129	163	54	103
	96	113	May-June	96	119	47	85
Tieton River	248	116	May-Sept	277	360	140	214
at Tieton Dam 10/	208	117	May-July	232	292	104	178
	165	119	May-June	166	211	78	139
Naches River	930	124	May-Sept	959	1237	366	748
nr. Naches 11/	815	122	May-July	856	1094	309	669
	680	122	May-June	666	846	260	557
Ahtanum Creek	48	123	May-Sept	50	68	16	39
nr. Tampico 12/	43	123	May-July	44	61	14	35
	37	123	May-June	37	49	12	30
LOWER COLUMBIA RIVER SYSTEM							
Mill Creek	21	117	May-Sept	30	39	13	18
nr. Walla Walla	17	121	May-July	25	33	9	14
	14	117	May-June	21	29	6	12
Lewis River	1110	119	May-Sept	977	1469	591	932
at Ariel 13/	925	121	May-July	810	1276	456	765
	770	120	May-June	672	1006	365	643
Cowlitz River	1850	112	May-Sept		2745	1001	1650
Blw. Mayfield Dam	1542	111	May-July		2397	815	1391
	1220	109	May-June		1837	659	1123
Cowlitz River	2330	111	May-Sept	2318	3282	1316	2108
at Castle Rock 14/	2000	115	May-July	1945	2848	1056	1741
	1590	113	May-June	1483	2183	858	1407

10/ Observed flow corrected for storage in Rimrock Lake.
11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.
12/ Observed flow of North and South Forks (Combined).
13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.
14/ Observed flow corrected for storage in Mayfield Reservoir.

Basin, Stream and Station	Forecast Runoff 1976	% 15-Yr. Avg.	Seasonal Streamflow in Thousands of Acre-Feet: Fore-cast period	1975	1974	1973	15-Yr. Average 58-72
OLYMPIC PENINSULA							
DUNGENESS RIVER SYSTEM							
Dungeness River	160	109	May-Sept		187	109	147
nr. Sequim	130	109	May-July		145	86	119
	94	111	May-June		93	62	85
PUGET SOUND							
SKAGIT RIVER SYSTEM							
Skagit River at Newhalem 15/	2760	131	May-Aug.	2500	2759	1381	2037
CEDAR RIVER SYSTEM							
Cedar River at Cedar Falls	122	134	Apr-Sept		145	53	91
GREEN RIVER SYSTEM							
Green River blw. Howard Hanson Dam 16/	330	150	May-Sept	290	372	124	220

15/ Observed flow corrected for storage in Diablo, Ross and Gorge Reservoirs.
16/ Observed flow corrected for storage in Howard Hanson Dam.

COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about May 1, 1976 as percent of the same date in 1975 and 1974 and average of record.

Tributary Basins	No. of Courses Average	1976 Snow Water Expressed as percent of 1975	1974	1958-72 Avg.
UPPER COLUMBIA BASIN				
Pend Oreille	13	70	66	96
Kettle	12	88	103	143
Spokane	9	86	78	99
Okanogan	32	82	74	113
Methow	6	52	36	71
Chelan	1	120	99	136
Entiat	10	124	87	141
Wenatchee	8	91	107	212
Yakima	17	86	71	135
LOWER COLUMBIA				
Asotin Creek	1	89	68	114
Mill Creek	1	-	64	178
White Salmon	2	99	64	108
Lewis	17	116	74	172
Cowlitz	5	99	73	115
PUGET SOUND				
Nisqually	4	108	79	-
White	3	88	79	91
Green	2	78	64	84
Snoqualmie	1	86	62	117
Skykomish	2	89	74	113
Skagit	13	123	109	182
Baker	11	127	118	165
Nooksack	1	114	65	-
OLYMPIC PENINSULA				
Skokomish	3	109	77	-
Elwha	1	121	109	126
Morse	1	128	105	-

RESERVOIR STORAGE - 1000 ACRE FEET

BASIN STREAM	RESERVOIR	USABLE 1/ CAPACITY	Measured (May) 1976	1975	1974	Normal*
		COLUMBIA				
Spokane	Coeur d'Alene Lake	225.1	236.7	204.2	419.1	253.2
Columbia	Franklin D. Roosevelt Lake	5232.0	659.3	312.1	-1948.0	1654.6
Columbia	Banks Lake	761.8	597.3	550.7	548.2	457.7
Okanogan	Conconully Reservoir	13.0	11.3	11.0	10.1	11.2
Okanogan	Salmon Lake	10.5	9.8	9.5	9.9	7.8
Chelan	Lake Chelan	676.1	367.3	79.0	188.5	225.1
		YAKIMA				
Yakima	Keechelus Lake	157.8	104.5	99.5	116.5	121.2
Kachess	Kachess Lake	239.0	218.5	176.5	149.8	199.2
Cle Elum	Lake Cle Elum	436.9	307.3	276.6	249.7	310.9
Bumping	Bumping Lake	33.7	8.0	3.0	8.4	16.1
Tieton	Rimrock Lake	198.0	141.2	134.8	144.3	146.9
		PUGET SOUND				
Skagit	Ross Reservoir	1404.1	743.0	385.9	700.2	751.2
Skagit	Diablo Reservoir	90.6	87.1	86.9	85.7	85.7
Skagit	Gorge Reservoir	9.8	8.4	7.9	7.9	-

1/ Based on Active Storage
* 15-year Average 1958-72

SOIL MOISTURE - MAY

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of May 1 1976	1975	1974
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	4.3	3.8	3.8
Trout Creek	3-M	3600	48	7.3	4.9*	-	5.6
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	-	-	4.8
Lake Cle Elum	21B14M	2200	48	12.8	-	-	9.1
WALLA WALLA							
Couse	17C3m	3650	48	11.1	-	-	-
Helmers	17C2M	4400	48	12.0	-	-	-
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	15.2	12.4	13.0

* April Measurement

FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content Inches as of Oct. 1 1975	1974	1973
OKANOGAN							
Salmon Meadows	19A02M	4500	48	5.4	3.2	1.8	2.6
Trout Creek	3-M	3600	48	7.3	3.1	3.0	2.8
YAKIMA							
Domery Flat	21B20m	2200	48	6.9	-	-	2.6
Lake Cle Elum	21B14M	2200	48	12.8	-	-	6.1
WALLA WALLA							
Couse	17C3m	3650	48	11.1	7.3	-	5.6
Helmers	17C2M	4400	48	12.0	6.5	-	7.6
WENATCHEE							
Upper Wheeler	20B7M	4400	48	12.7	8.6	5.4	6.0

PRECIPITATION 1/

Division Average Observations and Departures

Drainage Divisions	FALL Sept-Oct Observed	FALL 1975 2/ Departure	WINTER Nov. 1975--Mar. 1976 Observed	WINTER Departure	SPRING April, 1976 Observed	SPRING Departure
Columbia in Canada	3.51	+ 0.96	13.54	+ 0.79	1.13	- 0.33
Pend Oreille - Spokane	4.27	- 0.21	18.45	- 0.30	2.19	- 0.11
Northeastern Washington	2.29	- 0.49	9.45	- 1.66	1.56	+ 0.11
Southeastern Washington	2.94	- 0.29	11.77	- 1.70	2.01	- 0.02
Central Washington	5.47	+ 0.72	33.67	+ 6.14	1.87	- 0.32
North Central Washington	1.22	- 0.40	5.87	- 0.85	0.50	- 0.39
Northwest Slope Cascades	15.42	+ 2.73	65.16	+12.93	4.89	- 1.48
Southwest Slope Cascades	8.34	- 0.34	46.34	+ 4.70	3.76	- 0.86

Northeastern Washington - Lower Spokane, Colville, Sanpoil and Lower Kettle Drainages.

Southeastern Washington - Touchet, Tucannon and Palouse Drainages.

Central Washington - Yakima, Wenatchee and Chelan Drainages.

North Central Washington - Methow and Okanogan Drainages.

Northwest Slope Cascades - Puget Sound Drainages.

Southwest Slope Cascades - Lower Columbia Drainages.

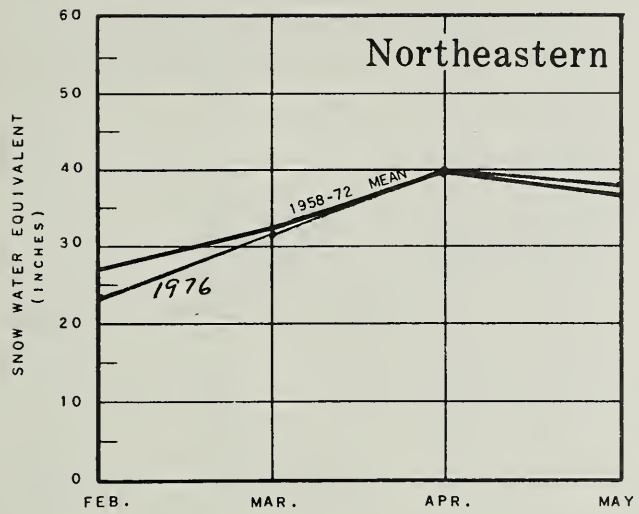
1/ - Preliminary analysis by National Weather Service from data furnished by Meteorlogical Services of Canada and the National Weather Service.

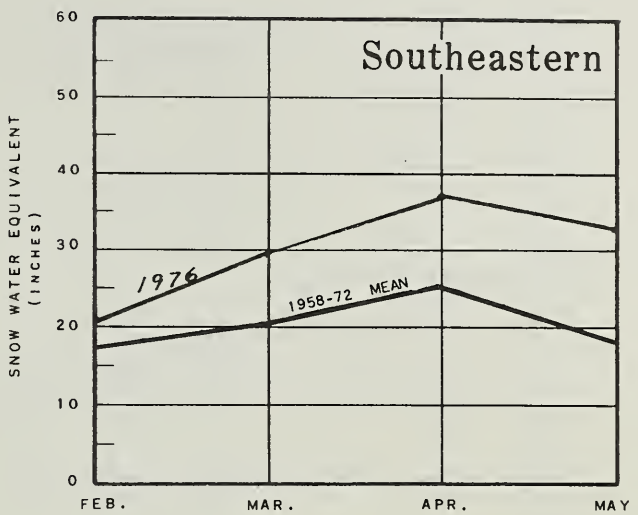
2/ - Departure from 15-year (1958-72) drainage division average.

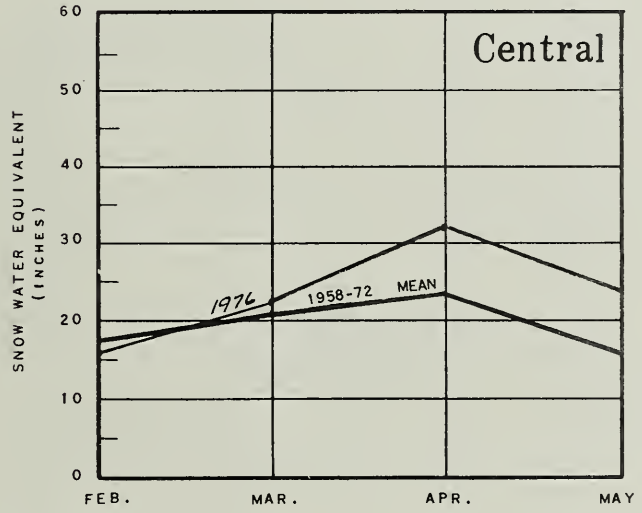
WASHINGTON SNOW COVER

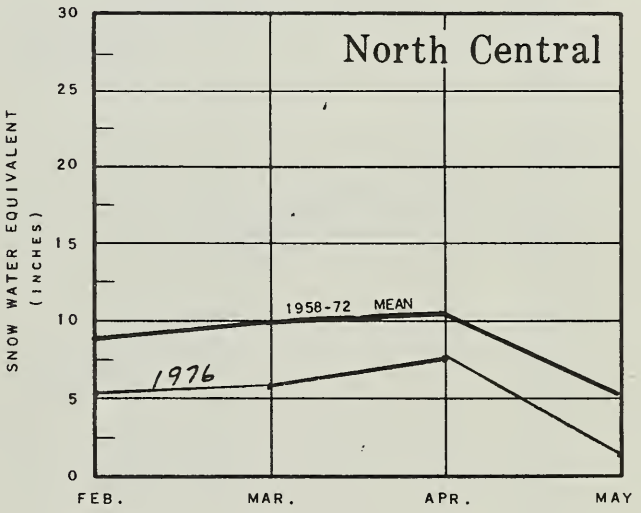
1976

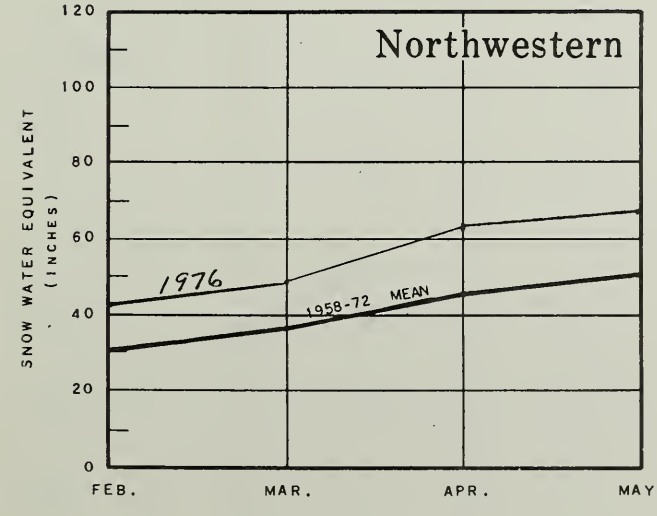
DRAINAGE AREAS

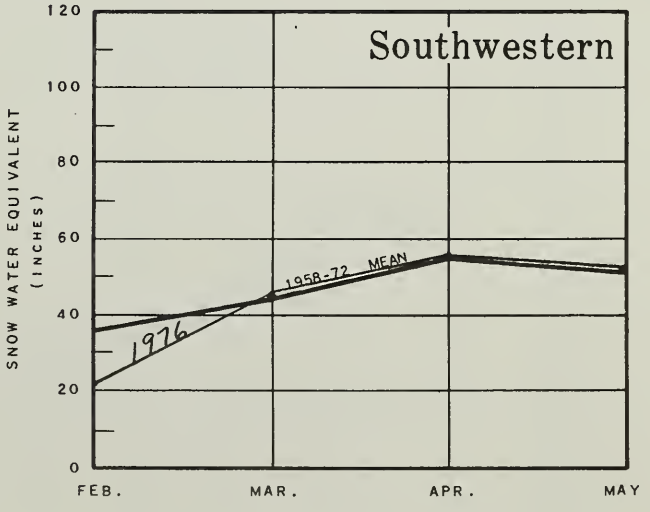








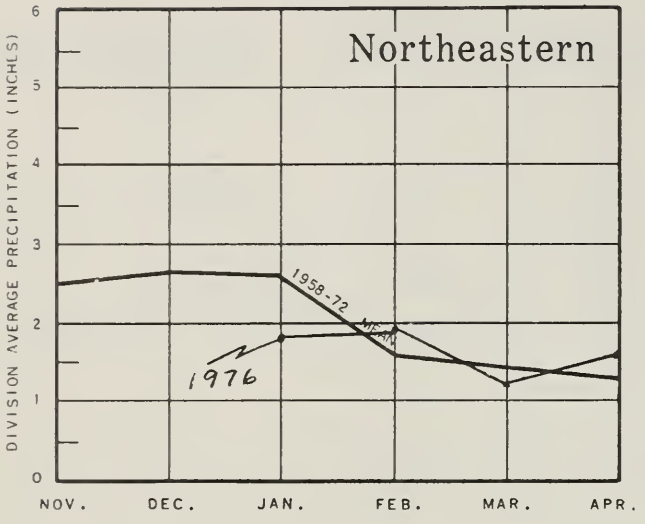


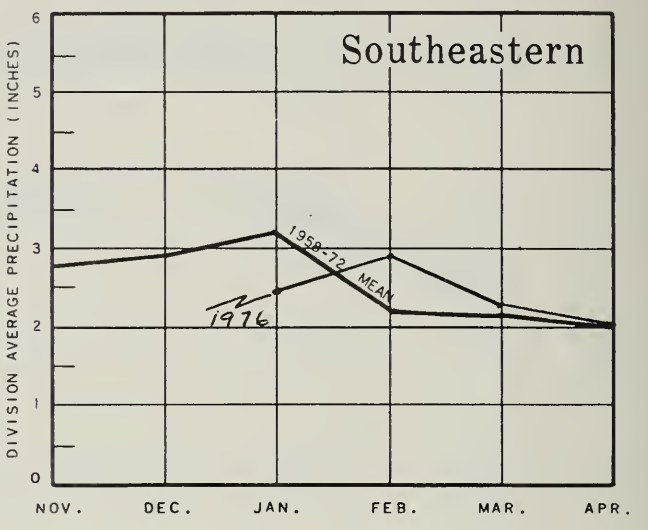


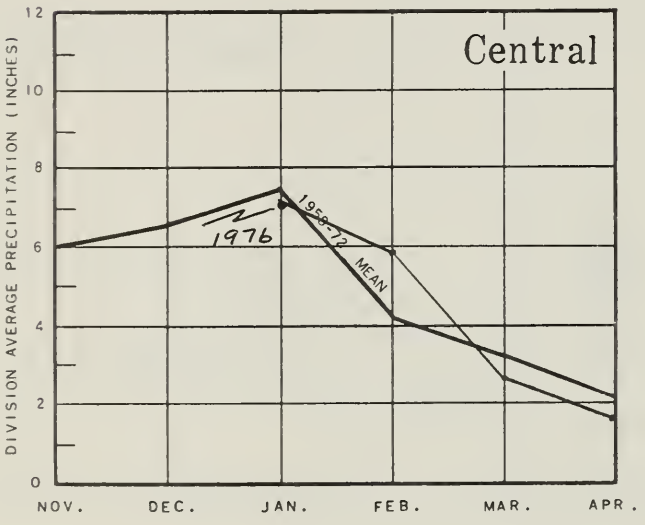
WASHINGTON VALLEY PRECIPITATION

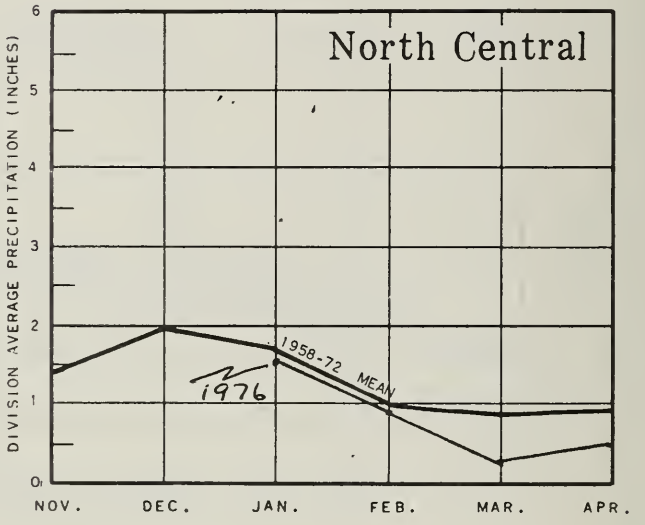
1976

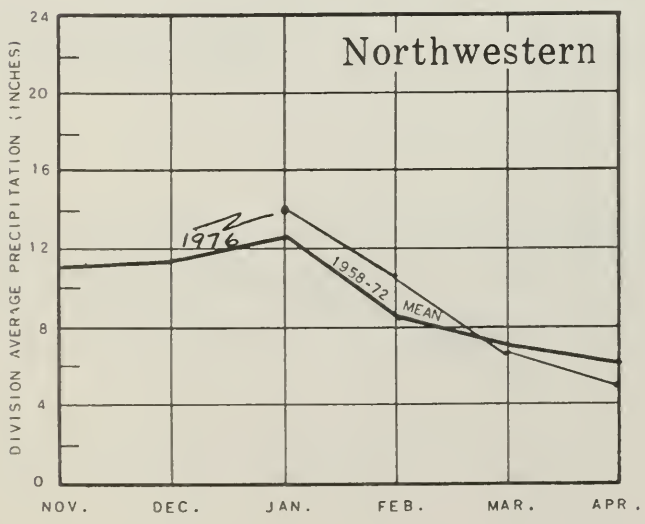
DRAINAGE AREAS

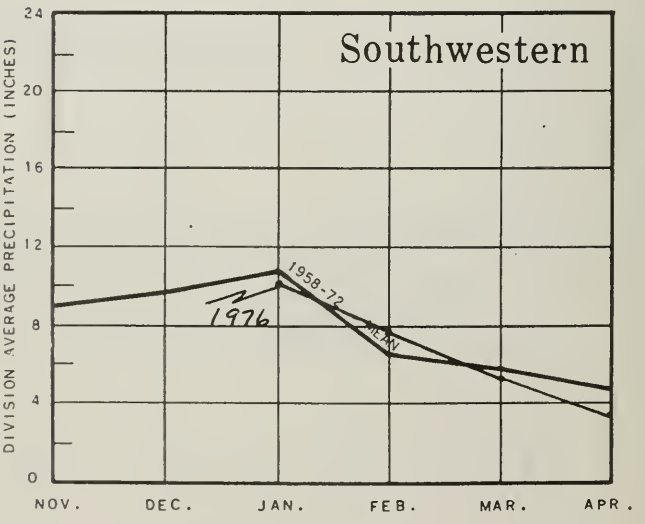






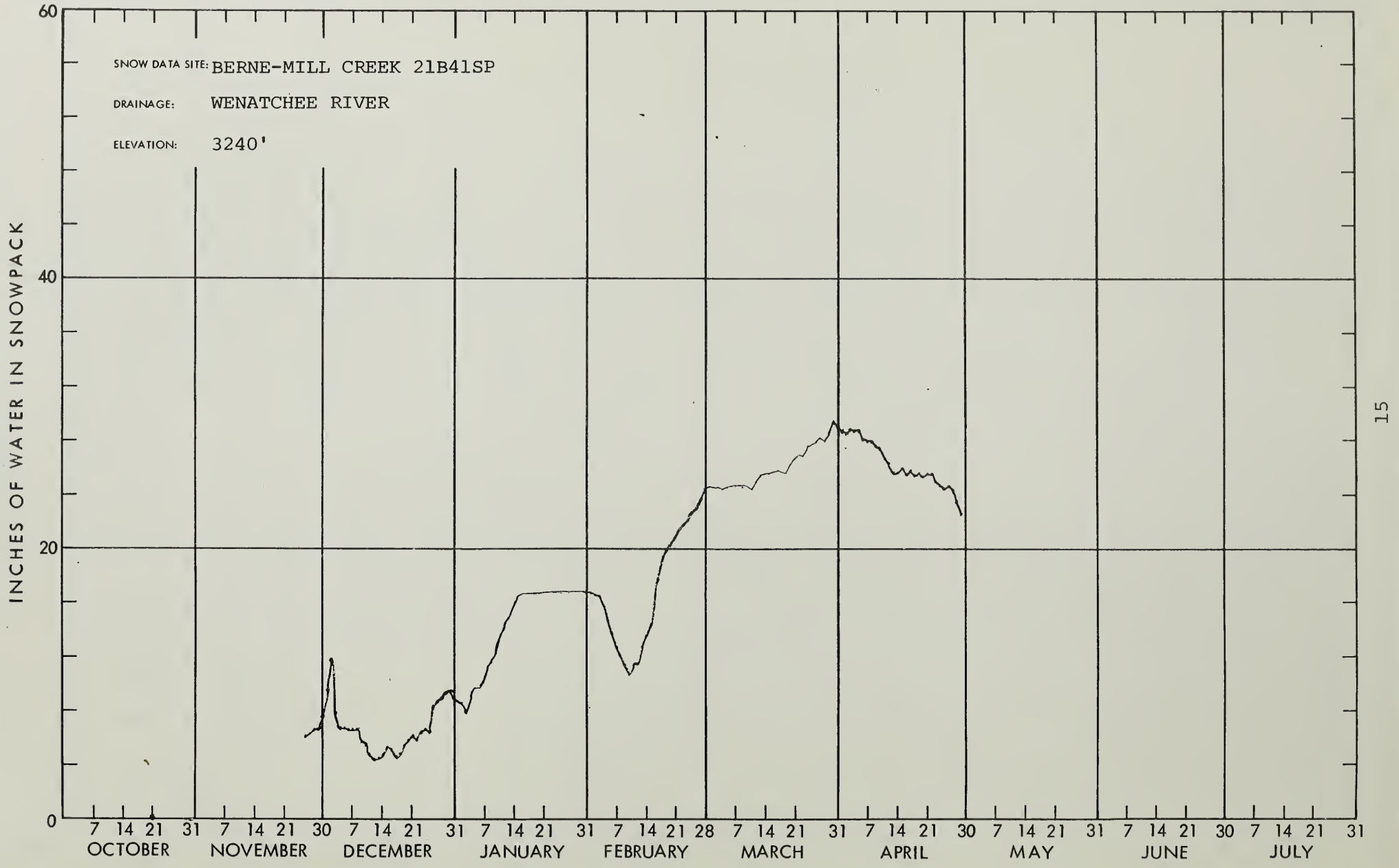






Preliminary Analysis by National Weather Service

WSFB-X13C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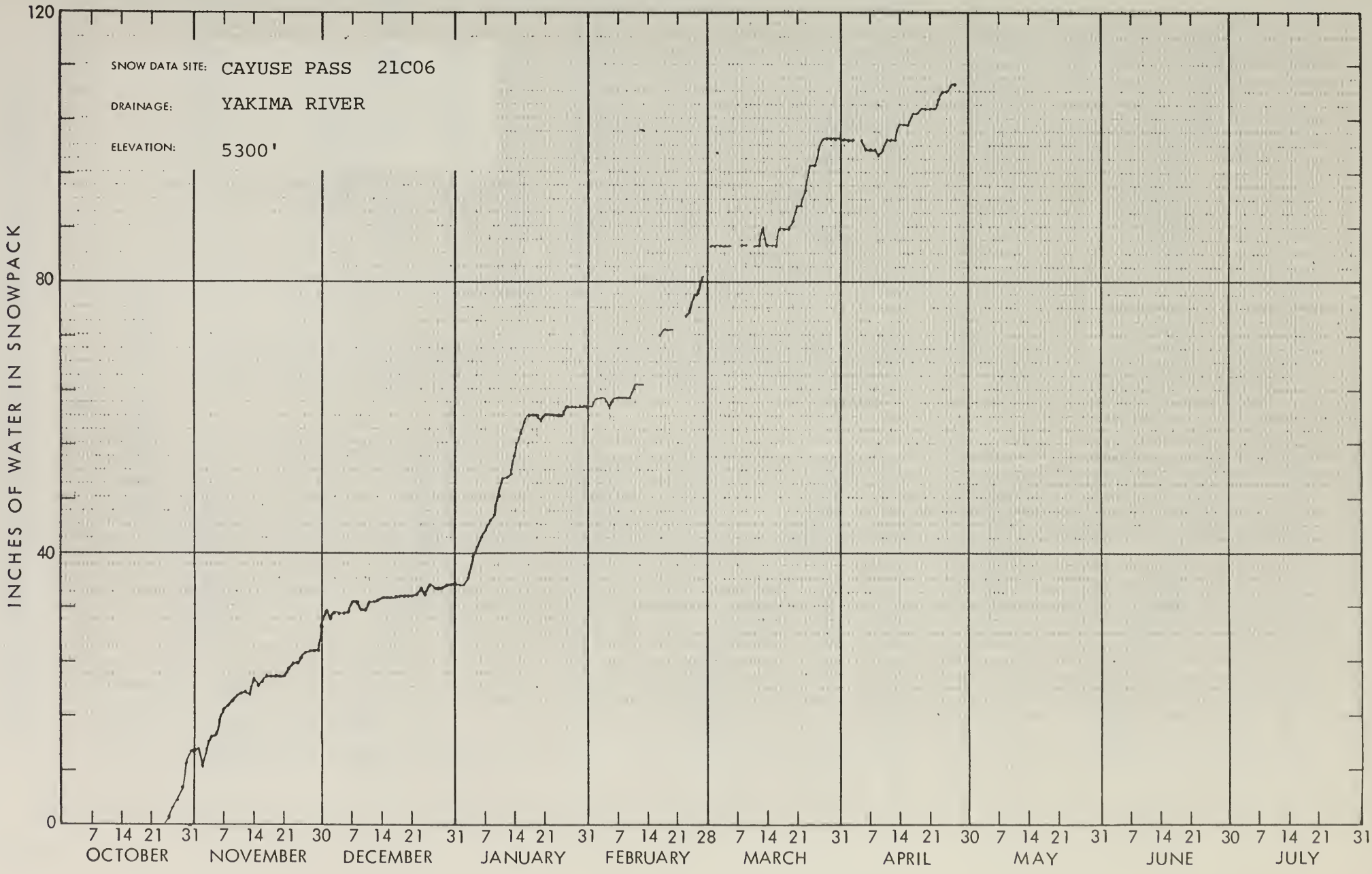
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY

WSFB-X13D

"LANDSAT" Relay from U.S.G.S., Tacoma



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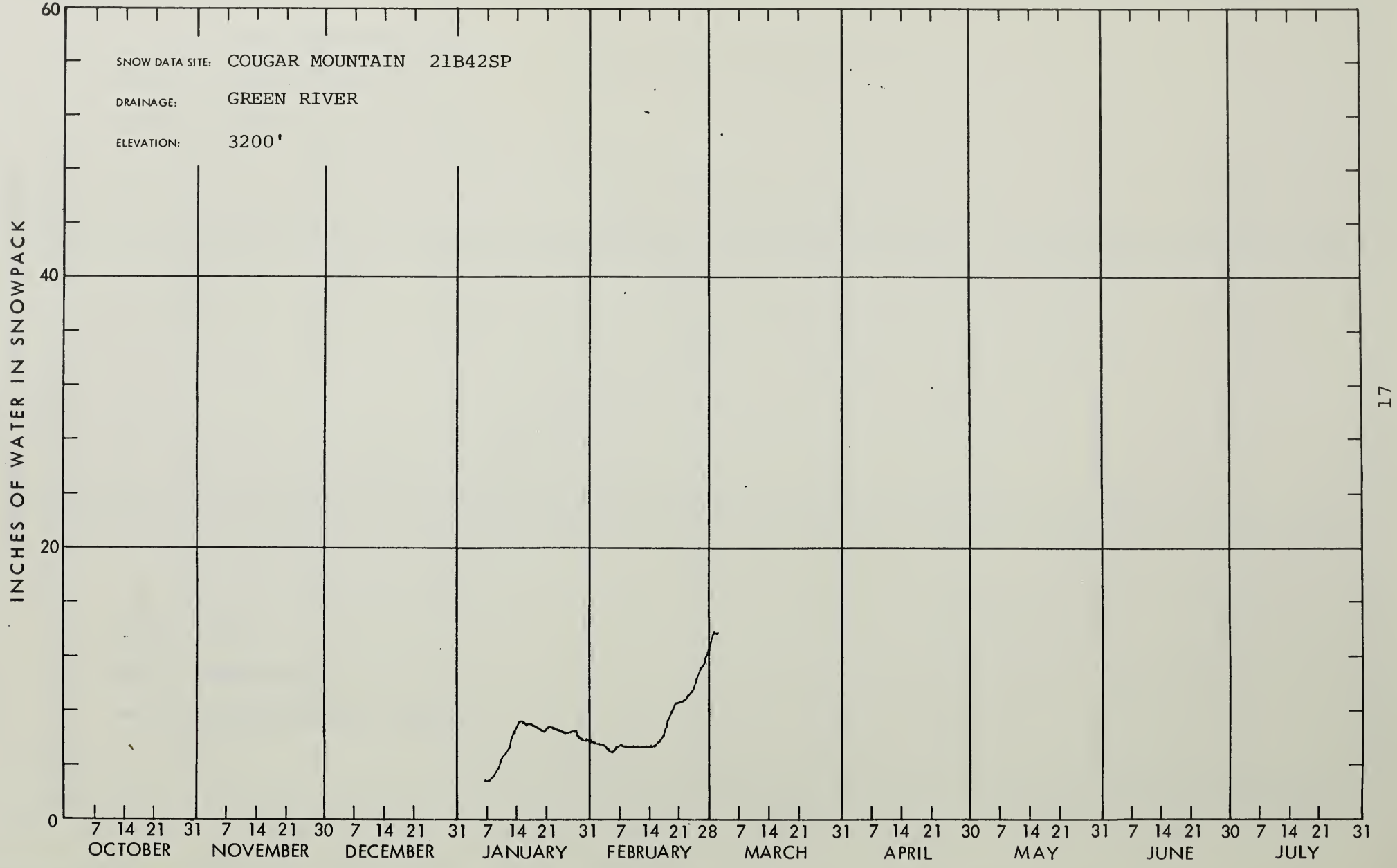
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20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY

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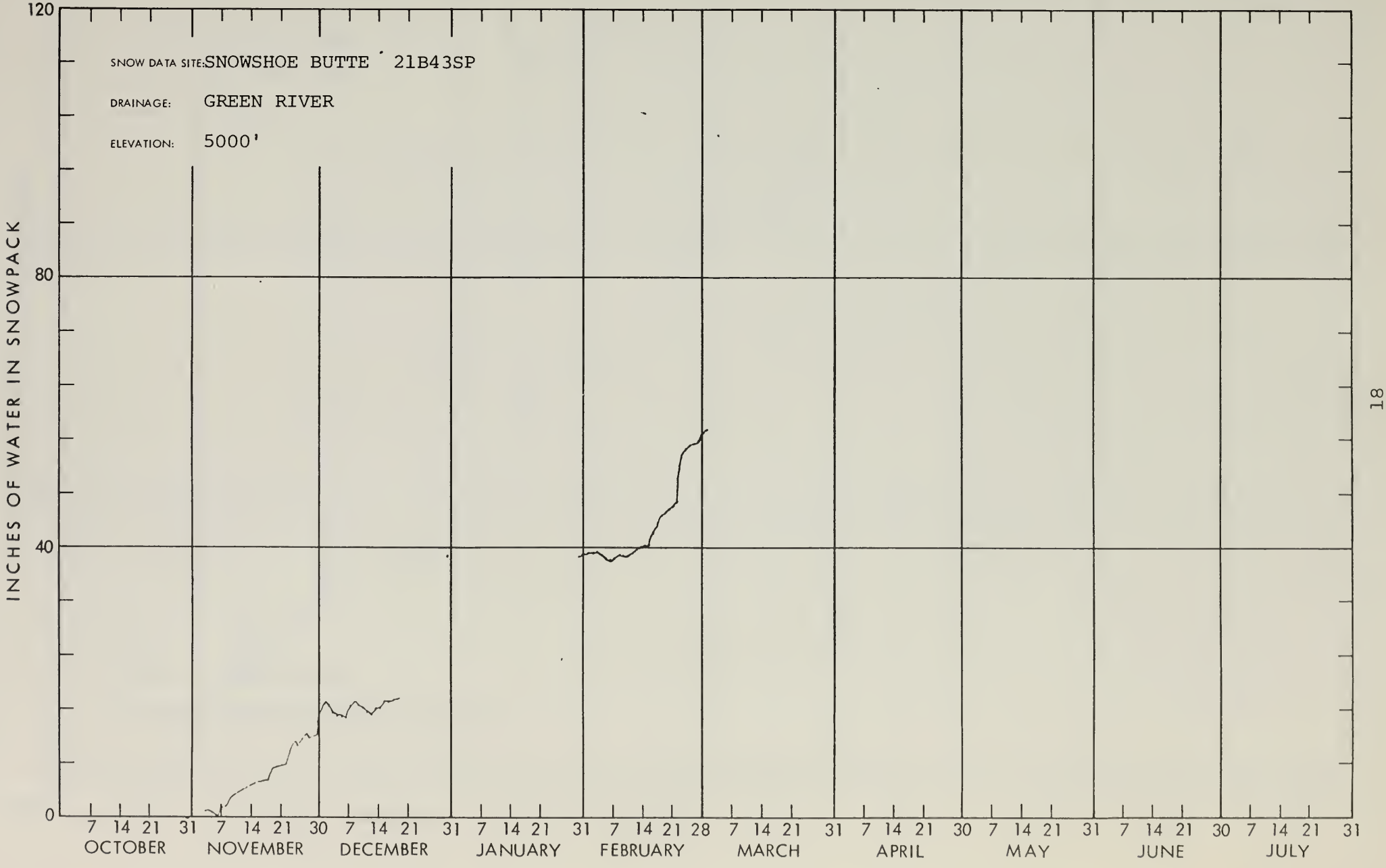
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OCTOBER
NOVEMBER
DECEMBER
JANUARY
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JUNE
JULY

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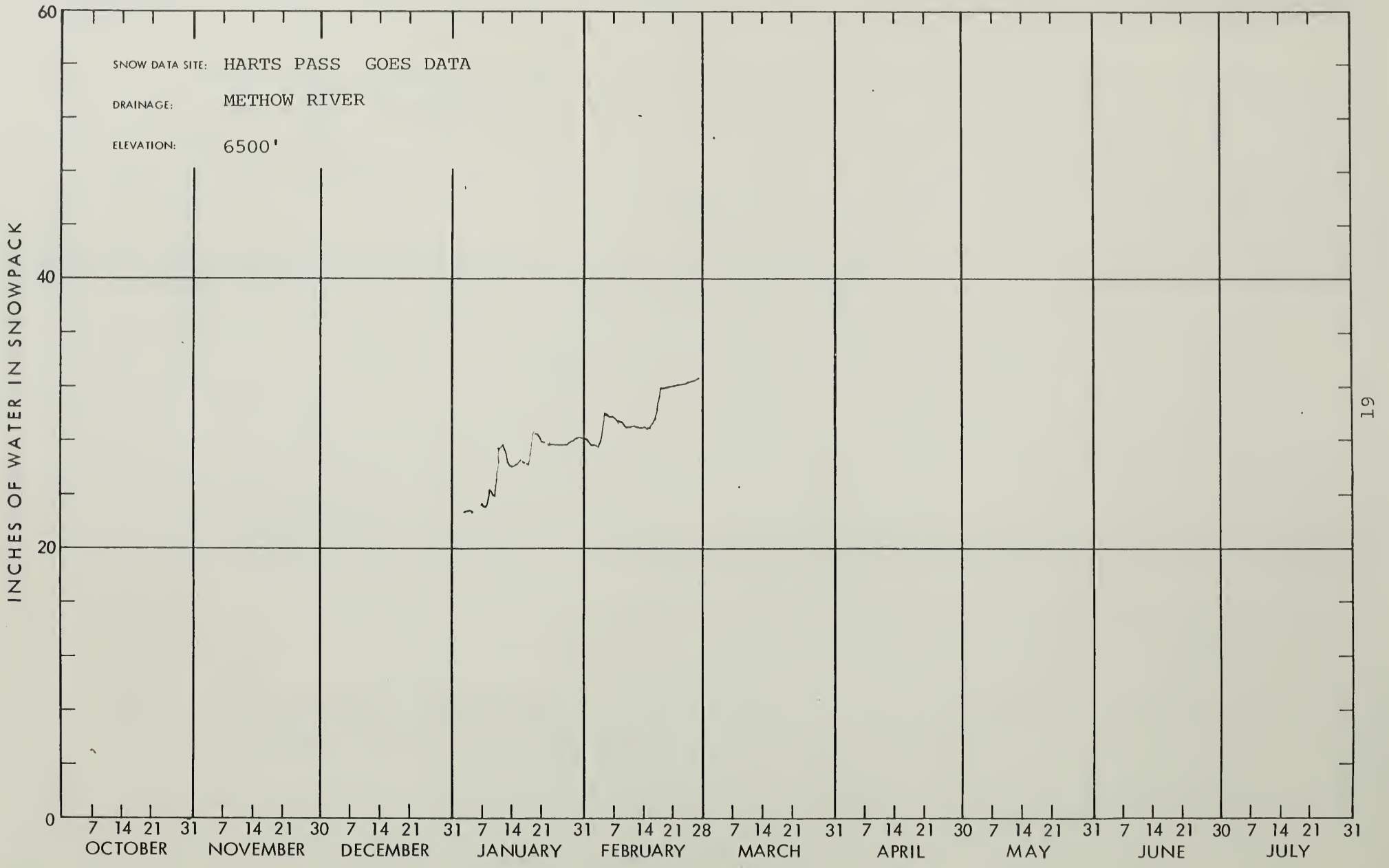
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20
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OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY

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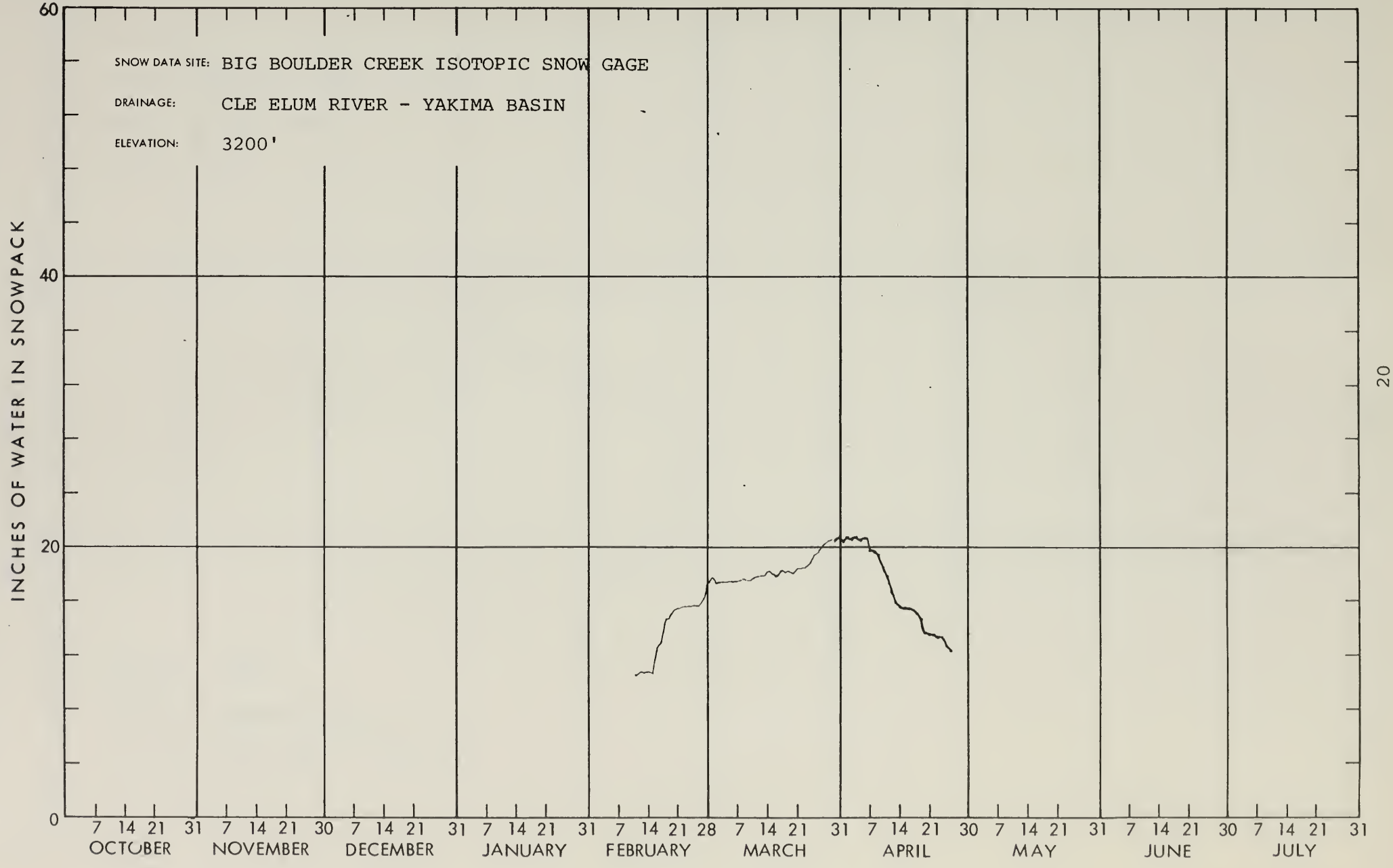
SNOW DATA SITE: BIG BOULDER CREEK ISOTOPIC SNOW GAGE
DRAINAGE: CLE ELUM RIVER - YAKIMA BASIN
ELEVATION: 3200'
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY
20

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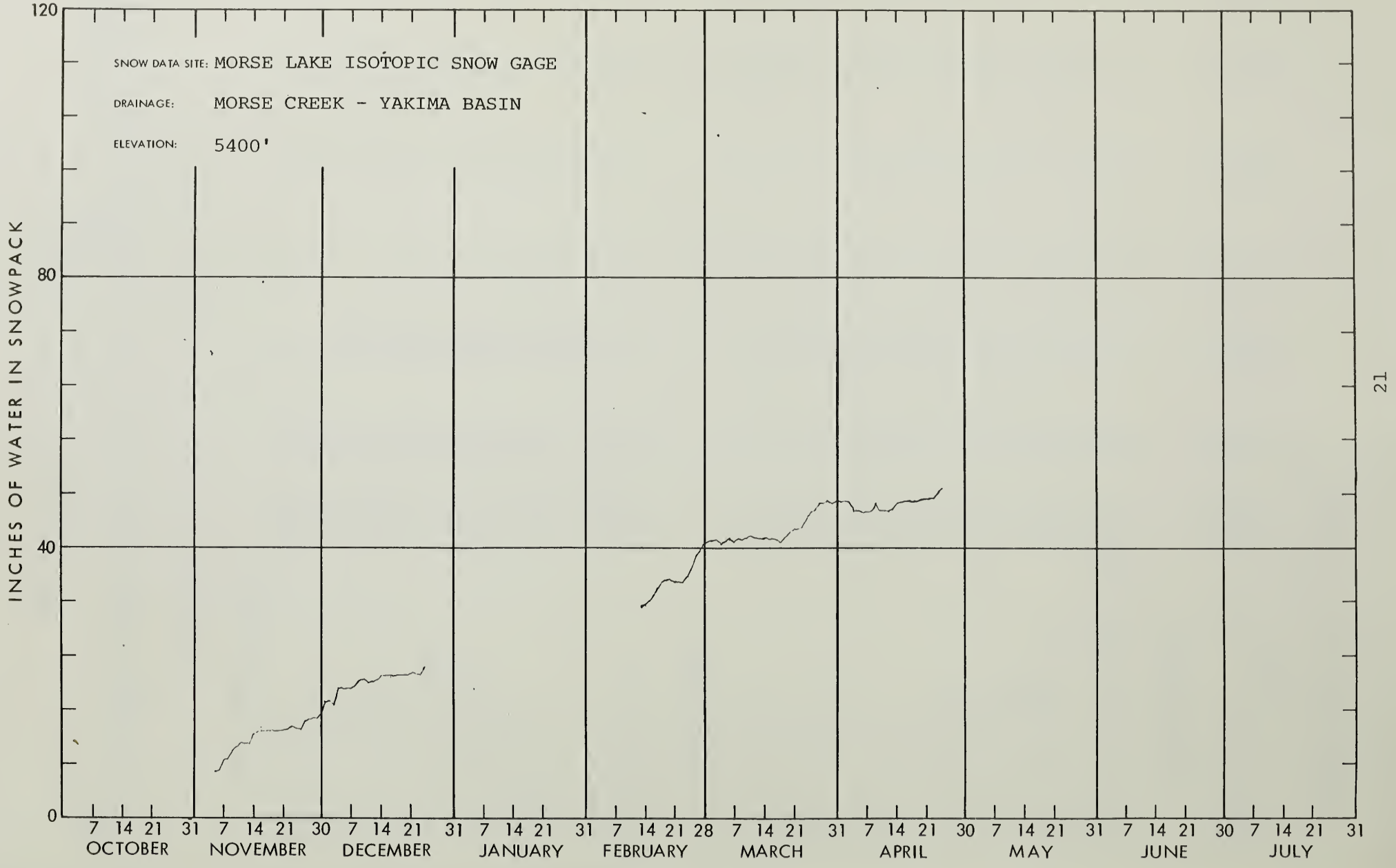
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DRAINAGE: MORSE CREEK - YAKIMA BASIN
ELEVATION: 5400'
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80
40
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE
JULY

SNOW DATA TO MAY 1, 1976 - APPENDIX 1

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average #
U P P E R C O L U M B I A D R A I N A G E							
PEND OREILLE RIVER							
Baree Creek	15B11	5500	5/3	113	56.2	61.4	49.6
Baree Midway	15B16	4600	5/3	78	37.1	47.8	35.1
Baree Trail	15B15	3800	5/3	1	0.3	10.3	1.2
Benton Meadow	16A02	2344	4/26	0	0.0	0.0	0.0
Benton Spring	16A03	4900	4/26	40	14.5	25.0	15.7
Boyer Mountain	17A02	5250	4/28	58	22.2	36.0	26.6
Brush Creek Timber	14A13	5000	4/29	22	8.1	11.9	8.2
Bunchgrass Meadow	17A01	5000	4/28	66	27.5	38.8	30.4
Heart Lake Trail	14C10	4800	4/28	49	20.9	30.2	19.0
Hoodoo Basin	15C10	6000	4/28	140	64.8	60.8	55.2
Hoodoo Creek	15C01	5900	4/28	126	56.4	57.6	52.2
Lookout	15B02	5250	4/15	99	37.5	-	-
			4/29	88	38.2	45.6	37.7
Nelson	19-Can	3050	4/29	23	7.5	15.6	7.0*
Smith Creek	16A01	4800	4/29	101	43.2	57.3	47.9
Winchester Creek	17A03	2970	4/28	0	0.0	9.5	1.6
KETTLE RIVER							
Barnes Creek	90-Can	5300	4/28	59	25.3	21.8	21.3*
Big White Mtn.	154-Can	5500	4/28	64	26.6	27.4	21.3*
Boulder Road	18A02	1450	4/28	0	0.0	0.0	0.0
Butte Creek	18A03	4070	4/28	23	7.9	10.9	5.9
Cabin Creek	18A08	3170	4/28	8.1	2.5	5.1	1.5
Carmi	126-Can	4100	4/28	12	5.5	5.5	1.9*
Farron # 1	17-Can	4000	4/29	34	12.7	13.6	8.2*
Farron # 2	243-Can	4000	4/29	32	12.9	14.4	New
Goat Creek	18A04	3595	4/28	0	0.0	0.0	0.0
Graystoke Lake	5-Can	5950	4/27	60	20.5	22.0	26.9*
Monashee Pass	48A-Can	4500	4/28	38	16.2	13.2	13.4*
Old Glory Mtn.	42-Can	7000	4/27	92	33.6	40.7	30.8*
Snow Caps Creek	18A05	2150	4/28	0	0.0	0.0	0.0
Snow Caps Trail	18A06	2720	4/28	0	0.0	0.0	0.0
Summit G. S.	18A07	4600	4/28	21	6.6	10.8	6.0
Trapping Creek Lower	166-Can	3050	4/28	0	0.0	0.0	0.0*
Trapping Creek Upper	165-Can	4450	4/28	25	10.0	12.4	6.1*
SPOKANE RIVER							
Above Burke	15B08	4100	4/29	60	25.9	33.6	-
Copper Ridge	16B02	4800	4/28	62	28.5	31.0	27.3
Forty-nine Meadows	15B03	5000	4/29	70	27.4	31.0	30.3

\# Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1976 - APPENDIX 2

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
SPOKANE RIVER (Cont.)							
Fourth of July Summit	16B03	3100	4/27	8.6	3.1	5.5	-
Granite Peak	15B13A	6000	4/29	121	44.0	46.2	48.3
Lookout	15B02	5250	4/15	99	37.5	-	-
			4/29	88	38.2	45.6	37.7
Lost Lake	15B14A	6000	4/29	154	59.2	59.6	62.0
Lower Sands Creek	16B01	3400	4/28	50	19.2	23.0	16.0
Medicine Ridge	15B04A	6150	4/29	126	46.8	47.4	51.5
Sherwin	16C01	3200	4/30	35	12.2	-	-
OKANOGAN RIVER							
Aberdeen Lake	6A-Can	4300	5/1	8.7	2.6	5.5	1.7*
Blackwall Mountain	100-Can	6250	4/29	107	51.8	38.0	38.8*
Bouleau Lake	234-Can	4580		Not Measured		-	15.3*
Brenda Mine	193-Can	4800	4/28	32	17.2	14.0	10.8*
Brookmere	27-Can	3200	5/1	13	3.9	10.3	5.9*
Carrs Landing Upper	168-Can	3200	4/29	0	0.0	0.0	0.0*
Enderby	130-Can	6250	5/3	109	45.5	49.8	43.1*
Esperon Creek Lower	164-Can	4400	4/25	30	10.5	15.0	11.0*
Esperon Creek Middle	163-Can	4700	4/25	38	14.5	20.4	13.9*
Esperon Creek Upper	162-Can	5400	4/25	48	19.1	24.7	20.4*
Freezeout Meadows New	20A38	5000	4/25	102	43.9	44.0	-
Graystoke Lake	5-Can	5950	4/27	60	20.5	22.0	26.9*
Hamilton Hill	107-Can	4900	4/29	46	17.9	15.7	13.4*
Harts Pass	20A05A	6500	4/25	144	65.9	53.9	50.7
Isintok Lake	152-Can	5510	4/30	35	9.6	10.8	7.3*
Lost Horse Mountain	105-Can	6300	5/1	35	12.3	13.4	10.7*
Loup Loup	19A07	4650	4/29	3.2	1.8	9.0	-
McCulloch	4-Can	4200	4/30	9	3.2	6.2	2.8*
Missezula Mountain	106-Can	5100	4/28	26	9.1	11.1	4.5*
Mission Creek	5A-Can	6000	4/27	70	25.9	26.2	21.7*
Monashee Pass	48A-Can	4500	4/28	38	16.2	13.2	13.4*
Mount Kobau	156-Can	5950	4/30	34	11.4	15.7	13.7*
Mutton Creek No. 1	19A01	5700	4/28	19	6.5	16.1	10.9
Mutton Creek No. 2	19A04	6000	4/28	34	9.6	17.3	15.5
Mutton Creek No. 2 SP	19A11SP	6000	4/28	-	8.6	14.8	-
New Copper Mountain	46A-Can	4300	4/28	0	0.0	2.7	3.7*
New Penticton Res. #2	183-Can	5225	4/29	28	9.2	12.5	-
Nickel Plate Mtn.	47-Can	6200	4/28	33	10.6	11.6	7.9*
Postill Lake	55-Can	4500	4/30	22	8.0	10.2	6.8*
Quartette Lake	34-Can	4000	4/27	49	19.1	9.9	-
Rusty Creek	19A03	4000	4/28	0	0.0	4.3	0.6
Salmon Meadows	19A02	4500	4/28	5.2	1.7	9.2	5.4

\# Average based on 1958-72 average
* Average for years of record

USDA SCS PORTLAND, OREGON 1973

SNOW DATA TO MAY 1, 1976 - APPENDIX 3

SNOW

DRAINAGE BASIN and/or SNOW COURSE NAME	Number	Elevation	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (Inches)	THIS YEAR: Water Content (Inches)	PAST RECORD: Water Content (inches) Last Year	PAST RECORD: Water Content (inches) Average #
OKANOGAN RIVER (Cont.)							
Silver Star Mountain	99-Can	6050	5/1	80	37.2	36.7	27.4*
Summerland Reservoir	3A-Can	4200	5/1	21	8.0	13.0	6.7*
Trout Creek	3-Can	4700	4/29	22	8.0	10.7	5.2*
Vaseux Creek	233-Can	4600	5/1	11	4.0	5.4	2.9*
White Rocks Mountain	70-Can	6000	4/30	59	25.0	35.4	28.3*
ENTIAT RIVER							
Blue Creek G. S. +	20B28a	5425	4/26	126	59.2	44.9	New
Brief	20B19	1600	4/24	0	0.0	0.0	0.0
Entiat Meadows +	20A33a	4800	4/26	142	66.7	45.8	41.0
Entiat River Trail +	20A34a	3150	4/26	56	22.0	10.1	9.7
Four Mile Ridge +	20B27a	7000	4/26	111	52.2	44.0	-
Fox Camp +	20A36a	6510	4/26	168	79.0	64.2	63.5
Pope Ridge	20B20	4300	4/29	28	11.0	18.5	8.2
Pugh Ridge +	20A32a	6400	4/26	109	51.2	41.8	38.7
Shady Pass	20A37	6200	4/30	88	41.7	36.1	-
Snow Brushy +	20A35a	3850	4/29	59	23.2	34.0	30.8
Tommy Creek +	20B21a	5300	4/26	64	30.1	22.4	22.5
METHOW RIVER							
Harts Pass	20A05A	6500	4/25	144	65.9	53.9	50.7
Loup Loup	19A07	4650	4/29	3.2	1.8	9.0	-
Mutton Creek No. 1	19A01	5700	4/28	19	6.5	16.1	10.9
Mutton Creek No. 2	19A04	6000	4/28	34	9.6	17.3	15.6
Mutton Creek No. 2 SP	19A11SP	6000	4/28	-	8.6	14.8	-
Rusty Creek	19A03	4000	4/28	0	0.0	4.3	0.6
Salmon Meadows	19A02	4500	4/28	5.2	1.7	9.2	5.4
CHELAN LAKE BASIN							
Rainy Pass	20A09	4780	4/25	130	60.2	49.8	44.3
WENATCHEE RIVER							
Berne-Mill Creek	21B23	2925	4/29	69	29.0	39.3	21.1
Berne-Mill Creek New SP	21B41SP	3240	4/29	45	20.0	31.4	17.7
Blewett Pass No. 2	20B02	4270	4/13	43	17.4	20.2	13.0
			4/28	35	16.2	19.5	9.5
Chiwaukum G. S.	20B16	1810	4/29	0	0.0	0.0	1.8
Fish Lake	21B04	3371	4/26	94	40.8	37.0	26.7
Lake Wenatchee	20B05	1970	4/29	19	8.0	5.4	1.6
Leavenworth R. S.	20B17	1127	5/1	0	0.0	0.0	0.0

\# Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1976 - APPENDIX 4

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
WENATCHEE RIVER (Cont.)							
Merritt	20B18	2140	4/29	26	11.2	15.6	3.8
Stevens Pass	21B01	4070	4/15	156	59.3	67.6	55.2
			4/29	141	63.3	69.2	55.8
Stevens Pass Sand Shed	21B45	3700	4/15	109	42.9	48.9	-
			4/29	95	42.3	48.7	-
SQUILCHUCK CREEK							
Beehive Springs	20B03	4400	4/28	0	0.0	5.4	1.7
Scout-A-Vista	20B04	3400	4/28	0	0.0	0.5	0.4
STEMILT CREEK							
Jump-Off	20B08	4450	4/30	5.2	2.0	8.2	2.8
Stemilt Slide	20B06	5000	4/29	19	8.0	14.7	7.1
Upper Wheeler	20B07	4400	4/29	0	0.0	7.3	1.0
COLOCKUM CREEK							
Colockum Creek Upper	20B22	5300	4/29	8.7	4.5	17.5	-
Colockum Creek Lower	20B23	4300	4/29	0	0.0	8.5	-
Trough # 2	20B25SP	5310	4/29	7.7	4.3	New	
YAKIMA RIVER							
Ahtanum R. S.	21C11	3100	5/1	0	0.0	-	0.0
Big Boulder Creek	21B09	3200	4/26	41	17.0	20.9	7.4
Blewett Pass No. 2	20B02	4270	4/13	43	17.4	20.2	13.0
			4/28	34	16.2	19.5	9.5
Bumping Lake	21C08	3450	4/14	42	15.2	20.4	13.4
			4/30	28	11.4	14.8	9.4
Bumping Lake New	21C36	3400	4/14	56	21.4	26.4	-
			4/30	43	18.5	21.5	15.0
Cayuse Pass	21C06	5300	4/25	236	108.6	105.4	-
Corral Pass	21B13	6000	4/29	125	53.9	58.4	-
Fish Lake	21B04	3371	4/26	94	40.8	37.0	26.7
Joe Lake	21B46a	4624	4/27	219+	94.6	99.4	-
Lake Cle Elum	21B14M	2200	4/14	15	6.3	8.0	-
			4/29	0	0.0	0.0	0.0
Lemah Creek +	21B47a	3327	4/27	84	35.2	46.0	-
Morse Lake	21C17	5400	4/26	152	59.5	88.1	65.1
Olallie Meadows	21B02	3625	4/13	127	55.6	64.8	48.4
			4/30	122	57.1	66.5	48.6

\# Average based on 1958-72 average

\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1976 - APPENDIX 5

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
YAKIMA RIVER (Cont.)							
Satus Pass	20D01	4030		Not Measured		12.8	1.9
Stampede Pass SP	21B10SP	3860	4/13	-	42.6	53.8	43.4
			5/3	-	36.6	55.0	43.4
Tunnel Avenue	21B08	2450	4/15	75	29.6	33.0	20.1
			4/28	57	24.6	29.0	16.0
Van Epps Pass +	20B26a	5925	4/27	146	63.0	63.0	-
Waptus Lake +	21B49a	3024	4/27	80	33.3	41.9	-
White Pass (E. Side)	21C28	4500	4/15	74	28.9	34.0	26.0
			4/28	73	29.7	33.6	25.9
White Pass (L. Lake)	21C27	4500	4/25	82	35.8	39.3	28.6
L O W E R C O L U M B I A D R A I N A G E							
ASOTIN CREEK							
Spruce Springs	17C04	5700	4/26	72	29.5	33.3	25.8
MILL CREEK							
Tollgate	18D3M	5070	4/28	70	33.6	-	18.9
KLICKITAT RIVER							
Satus Pass	20D01	4030		Not Measured		12.8	1.9
WHITE SALMON RIVER							
Cultus Creek	21C12	4000	4/28	125	53.6	51.3	48.9
Surprise Lakes	21C13A	4250	4/28	126	56.3	59.7	52.9
WIND RIVER							
Old Man Pass	21D19	3100	4/28	51	22.6	18.6	12.6
LEWIS RIVER							
Blue Lake +	21C22a	4800	4/26	237	106.5	104.9	92.4
Bob's Trail	21C21	2200	4/26	40	18.7	12.1	7.8
Calamity Ridge +	21D01a	2500	4/26	20	8.0	3.5	1.3
Council Pass +	21C18a	4200	4/26	120	54.0	51.0	38.8
Cultus Creek	21C12	4000	4/26	125	53.6	51.3	48.9
Divide Meadow +	21C29a	5600	4/26	172	77.4	70.5	65.5
Grand Meadow	21C25	3500	4/26	60	26.7	30.6	22.4

\# Average based on 1958-72 average
\+ Snow water equivalent estimated from aerial stadia observation

USDA-SCS-PORTLAND OREGON 1973.

SNOW DATA TO MAY 1, 1976 - APPENDIX 6

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
LEWIS RIVER (Cont.)							
Lone Pine Shelter	21C26	3800	4/25	126	56.9	48.9	46.3
Marble Mountain +	22C05a	3200	4/26	99	42.2	35.5	33.2
Mosquito Meadows	21C19	4100	4/25	130	57.0	49.4	45.8
New Muddy River	22C06	2000	4/26	5.5	2.0	0.0	0.8
Old Man Pass	21D19	3100	4/26	51	22.6	18.6	12.6
Plains of Abraham +	22C01a	4400	4/26	160	73.6	80.1	76.9
Smith Creek Road	22C04	2100	4/26	10	4.2	7.4	5.3
Spencer Meadow +	21C20a	3400	4/26	62	27.3	23.5	16.1
Surprise Lakes	21C13A	4250	4/26	126	56.3	59.7	52.9
Table Mountain +	21C24a	4200	4/26	132	59.4	59.0	40.3
Timbered Peak +	21D18a	3000	4/26	52	23.4	15.8	9.9
COWLITZ RIVER							
Cayuse Pass	21C06	5300	4/25	236	108.6	105.4	-
Mosquito Meadows	21C19	4100	4/25	130	57.0	49.4	45.8
Plains of Abraham +	22C01a	4400	4/26	160	73.6	80.1	76.9
Potato Hill	21C14	4500	4/25	90	39.1	42.4	-
White Pass (E. Side)	21C28	4500	4/15	74	28.9	34.0	26.0
			4/28	73	29.7	33.6	25.9
White Pass (L. Lake)	21C27	4500	4/25	82	35.8	39.3	28.6
P U G E T S O U N D D R A I N A G E							
NISQUALLY RIVER							
Ghost Forest	21C04	4550	4/26	138	60.8	61.1	-
Longmire	21C03	2760	4/26	21	9.2	7.6	-
New Paradise Park	21C35	5500	4/26	205	95.2	93.0	-
Stem Glade	21C01	5050	4/26	204	90.6	84.4	-
WHITE RIVER							
Cayuse Pass	21C06	5300	4/25	236	108.6	105.4	-
Corral Pass	21C13	6000	4/29	125	53.9	58.4	-
Morse Lake	21C17	5400	4/26	152	59.5	88.1	65.1
GREEN RIVER							
Cougar Mountain SP	21B42SP	3200	4/21	51	21.0	-	-
			5/1	Not Measured		30.7	-
Snowshoe Butte SP	21B43SP	5000	4/28	160	68.9	76.5	-
Stampede Pass SP	21B10SP	3860	4/13	-	42.6	53.8	43.4
			5/3	-	36.6	55.0	43.4

\# Average based on 1958-72 average

\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1976 - APPENDIX 7

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME	Number	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average #
SNOQUALMIE RIVER							
Olallie Meadows	21B02	3625	4/13	127	55.6	64.8	48.4
			4/30	122	57.1	66.5	48.6
SKYKOMISH RIVER							
Stevens Pass	21B01	4070	4/15	156	59.3	67.6	55.2
			4/29	141	63.3	69.2	55.8
Stevens Pass Sand Shed	21B45	3700	4/15	109	42.9	48.9	-
			4/29	95	42.3	48.7	-
SKAGIT RIVER							
Beaver Creek Trail	21A04	2200	4/26	37	16.7	13.2	4.8
Beaver Pass	21A01	3680	4/26	91	42.0	35.0	34.0
Brown Top	21A28a	6000	4/25	206	96.6	71.2	-
Devils Park	20A04A	5900	4/25	148	69.0	55.1	49.5
Freezeout Cr. Trail	20A01	3500	4/25	36	14.9	12.9	8.2
Freezeout Meadows New	20A38	5000	4/25	102	43.9	44.0	31.0
Granite Creek	21A29	3500	4/26	59	24.6	19.0	-
Harts Pass	20A05A	6500	4/25	144	65.9	53.9	50.7
Klesilkwa	35B-Can	3700		Not Measured		-	11.3*
Meadow Cabins	20A08	1900	4/26	14	4.2	3.8	1.3
New Hozomeen Lake	21A30	2800	4/25	34	13.7	10.6	-
New Tashme	26A-Can	2500		Not Measured		10.5	5.6*
Quartette Lake	34-Can	4000	4/27	49	19.1	9.9	-
Rainy Pass	20A09	4780	4/25	130	60.2	49.8	44.3
Thunder Basin	20A07	4200	4/26	75	28.5	42.1	25.5
BAKER RIVER							
Baker Pass +	21A27a	4900	4/29	244	122.0	99.9	-
Dock Butte	21A11A	3800	4/29	207	101.6	78.8	77.4
Easy Pass	21A07A	5200	4/26	254	123.0	101.0	93.3
Jasper Pass	21A06A	5400	4/26	271	126.8	104.2	102.7
Komo Kulshan	21A17	800	4/28	0	0.0	87.0	80.4
Marten Lake	21A09A	3600	4/29	229	114.0	86.5	83.8
Mount Blum +	21A18a	5800	4/28	197	94.6	81.0	-
Panorama New	21A26	4300	4/17	185	85.1	82.7	-
			5/3	181	95.7	83.7	-
Rocky Creek	21A12A	2100	4/29	100	49.0	37.6	22.6
Schreibers Meadow	21A10A	3400	4/28	180	86.2	73.8	67.5

\# Average based on 1958-72 average
* Average for years of record
\+ Snow water equivalent estimated from aerial stadia observation

USDA SCS PORTLAND OREGON 1973

SNOW DATA TO MAY 1, 1976 - APPENDIX 8

SNOW			THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average #
BAKER RIVER (Cont.)							
S. F. Thunder Creek	21A14A	2200	4/29	15	8.0	5.7	1.1
Sulphur Creek	21A13	1600	4/28	44	20.9	14.1	6.4
Three Mile Creek	21A15	1600	4/29	0	0.0	0.0	0.0
Watson Lakes	21A08A	4500	4/29	194	92.0	77.2	76.9
NOOKSACK RIVER							
Panorama New	21A26	4300	4/17	185	85.1	82.7	-
			5/3	181	95.7	83.7	-
O L Y M P I C P E N I N S U L A							
MORSE CREEK							
Cox Valley	23B14	4500	4/27	135	57.9	45.1	-
ELWHA RIVER							
Hurricane	23B03	4500	4/26	86	34.0	28.1	26.9
SKOKOMISH RIVER							
Black & White	23B07	4200	4/25	140	58.2	53.2	-
Black & White Lakes	23B06	4700	4/25	161	74.4	72.6	-
Home Sweet Home	23B05	5200	4/25	228	94.0	80.8	-

Average based on 1958-72 average

Agencies Assisting with Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests and Water Resources,
Water Resources Service, British Columbia

States:

Washington State Department of Ecology
Washington State Department of Natural Resources

Federal:

Department of the Army
Corps of Engineers
U. S. Department of Agriculture
Forest Service
U. S. Department of Commerce
NOAA, National Weather Service
U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Geological Survey
National Park Service

PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.
Pacific Power and Light Company
Puget Sound Power and Light Company
Washington Water Power Company

OTHER PUBLIC AGENCIES

Okanogan Irrigation District
Wenatchee Heights Irrigation District

MUNICIPALITIES

City of Tacoma
City of Seattle

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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"The Conservation of Water begins with the Snow Survey"